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THE SPHERE, APRIL 3, 1943
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Vol. CLXXIII No. 2254 WITH WHICH IS INCORPORATED THE GRAPHIC APRIL 3 1943

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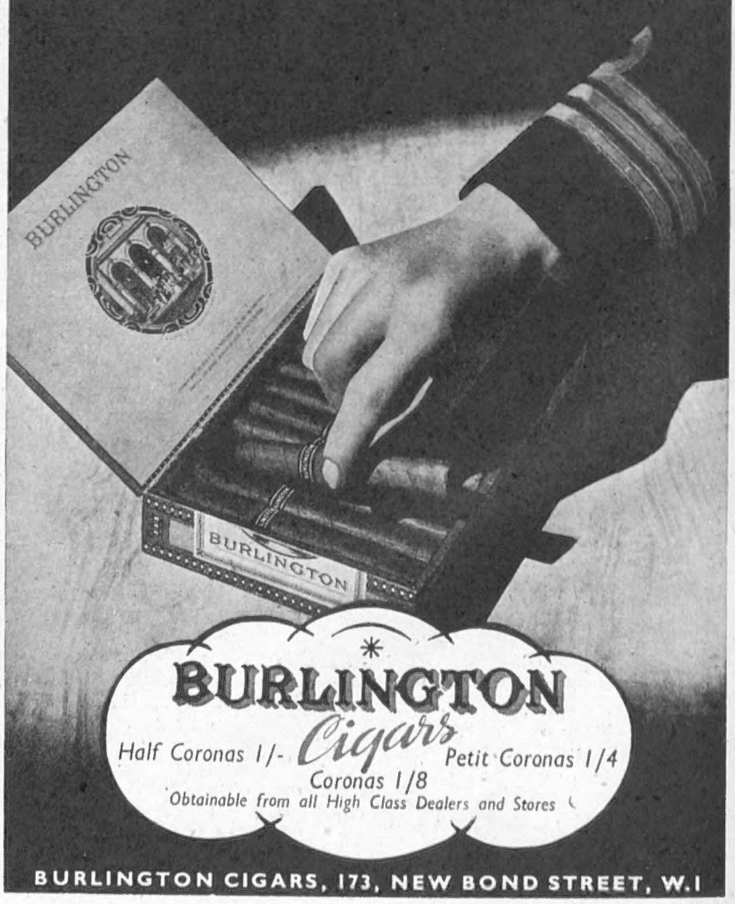

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Volume CLXXIII No. 2254 The SPHERE, London, April 3, 1943

THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly

THE MEN WHO ARE PLANNING THE OVERTHROW OF THE AXIS IN NORTH AFRICA: GENERAL GIRAUD MEETS GENERAL ALEXANDER FOR A CONFERENCE AT HIS HEADQUARTERS IN THE FIELD

Now that battle has been joined with the Axis all along the Tunisian front, General Sir Harold Alexander, Deputy Commander of the Allied Forces, has his hands full. General Giraud, too, has been active during the past few weeks, visiting the fighting fronts and conferring with his commanders and political advisers. This picture was taken in a canvas camp where Commander and Deputy Commander met a few days ago. News has now come through that General Giraud and General de Gaulle are on the point of meeting in order to co-ordinate the activities of Frenchmen against the common enemy. General Alexander, it will be noticed, is wearing his usual battle-dress, with the rather unusual addition of trousers fashioned out of corduroy!

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A WAR NEWSLETTER —No. 187

1, NEW OXFORD STREET, W.C.1.

"Set-back" in Tunisia—G.O.C. or P.R.O.?—I sometimes wonder which is the greater evil and vice—baseless and exuberant optimism or swift despair. And which in war is the greater thorn in the flesh of a commander: the public's impatience for action, petulance during delays, exuberant hallooing over early successes or profound disappointment at any and every set-back. That these manifestations *are* all thorns in the flesh of a commander in the field of a democratic country I make no doubt. That necessary evil, the G.O.C.'s Press conference, must handicap his efforts and often cause him anxious thought. It is unfortunate that a commander in the field to-day must double the parts of General and of Public Relations Officer. He must do more than w. battles. He must at all times, in lull or action, win and keep the "support" of the public at home. There is but one safe way for him. That is, to keep absolute silence, to dismiss his Press conference and confine his pronouncements to a terse, cool, colourless report of "business done" up to a given date, without offering any expectation that the advances won will be held or improved. Probably all commanders in 1943, after years of bitter experience, recognise the only safe way. But they naturally differ in character. When, on March 24, early in the morning, the Premier announced that the trumpeted gains of Montgomery's men at Mareth had been wiped out by a Nazi counter-attack, the public had not finished reading glowing accounts of the victory even in the soberest journals of that day. The resulting douche was ice-cold. There was little basis for this wishful thinking. It was, by all experience of African warfare, far too soon for hallooing. General Montgomery's *bulletins* had not encouraged hallooing. What *had* encouraged wishful thinking was a remark let fall by him before the attack began, an optimistic hint that once he began to move, he would move very quick, join up with the other Allied armies and finish the job. And there, I think, he spoke in his lesser role of "Public Relations Officer," alive to the "impatience" of his public. I doubt not at all he and his brother commanders will finish the job. I do not think the role of P.R.O. should be added to that of G.O.C. Each role is a whole-time job.

The Voice from Moscow.—Alexander Werth's broadcasts are among the most valuable we hear in our search for truth. There is about them a sympathy and understanding of Russia, a restraint and fair-mindedness, which appeal to me and convince me. And the last note which he struck was a sombre note, which yet should not cause us surprise, if it creates anxiety. The feeling of Moscow has undergone another change, this time from renewed confidence and hope to new anxiety and a sense of weariness bred of hope deferred and unceasing and intensive fighting, non-stop for a year. Stalin has sometimes warned the Allies that the resources of Russia are not inexhaustible. Large as his population is, it has been thrown *entire* into the struggle, and not a man, woman or child but has worked intolerably long hours without pause at the front or at the bench. On the ears of Russians, the "easy" phrase, "1944, 1945 or 1946," falls like a cold douche. I confess that sometimes in my conversations in England I am brought up sharply by the same easy acceptance of the probability that this will be a long business. I remember

BEFORE THE BATTLE OPENED: General Sir Harold Alexander holds an open-air Conference at his Headquarters in North Africa, when he addressed British and American War Correspondents. Seated at the extreme left is Air Vice-Marshal Conyngham, A.O.C.-in-C., Ground-Support Forces in Libya and Tunisia

the aftermath of 1918. In a very few months we had discovered—what we might have foreseen—that the strain of four years of war had not only made our bodies highly vulnerable to the chances of disease, but had affected our minds and nerves to an extent which twisted our judgment as never before in our history. Magnify that strain twofold—or fourfold. Then it is not so easy to talk easily of 1945 or 1946. We make progress. We do not sit and twiddle our thumbs. Churchill and Roosevelt have more than once said that their plans are laid, that this summer we shall intervene at more than one place on the European continent. More than this, they have unequivocally declared that Stalin has been informed of what our plans are and of the details of our "time-table," in so far as a "time-table" is any way reliable against the imponderables and chances of war. The voice of Moscow is not therefore necessarily the exact expression of the mind of Stalin. But . . . one can sympathise with the voice of Moscow and find in the expression of Moscow's mind sound sense, urgency and very real anxiety.

The Hitler Mystery.—With my newly-announced adherence to the rumour-mongers *vis-à-vis* the new Hitler, I must spoil some newsprint with this nasty subject. Dummy or drugged? Fake or Führer? It is a most poignant basis for rumour, not without local colour. Was this the voice that launched a thousand hells? And what *did* the Germans think of it? Still more piquant, what did the old gods on Olympus think of it all? I believe even sadists (and Olympus is sadistic) tire at last of observing victims on the rack. Nero sometimes got bored of watching Christian virgins being mauled by beasts and would turn up his nasty, reluctant thumb. If there is one certainty in the fog of war, it is that this tragedy of humanity could have been averted if *one man* had willed for peace and not for war—Hitler. To-day, of all the millions fighting and suffering (apart from the Japanese, of whom we know nothing), it is safe to say that not 5 per cent. remain unconvinced of the total evil of war and that 95 per cent. would, if they could achieve security and justice, outlaw it for ever, if that can be done. And that, if true, is a notable advance for humanity and a great good come out of a great tragedy. Yet it looks very much as if the famous farce of Michael Finsbury and the Great Tontine—Stevenson's *Wrong Box*—is being re-enacted before Olympus. The only begetter of all this agony and waste is being preserved in underwear and cotton wool by the Michael Finsburys of the Brown House, while 95 per cent.—inarticulate, unable to communicate or to break out *en masse* from the torture-chamber—continue to hand over to this Great Tontine prize all that remains of the treasures of civilisation. The prize which no one can win at last. "'It 's simply a readjustment,' Michael explained. 'I take over Uncle Joseph's liabilities and, if he gets the tontine, it 's to be mine.'" If. . . . Can even the sadists on Olympus extract a smile at tragi-comedy so farcical and fearful?

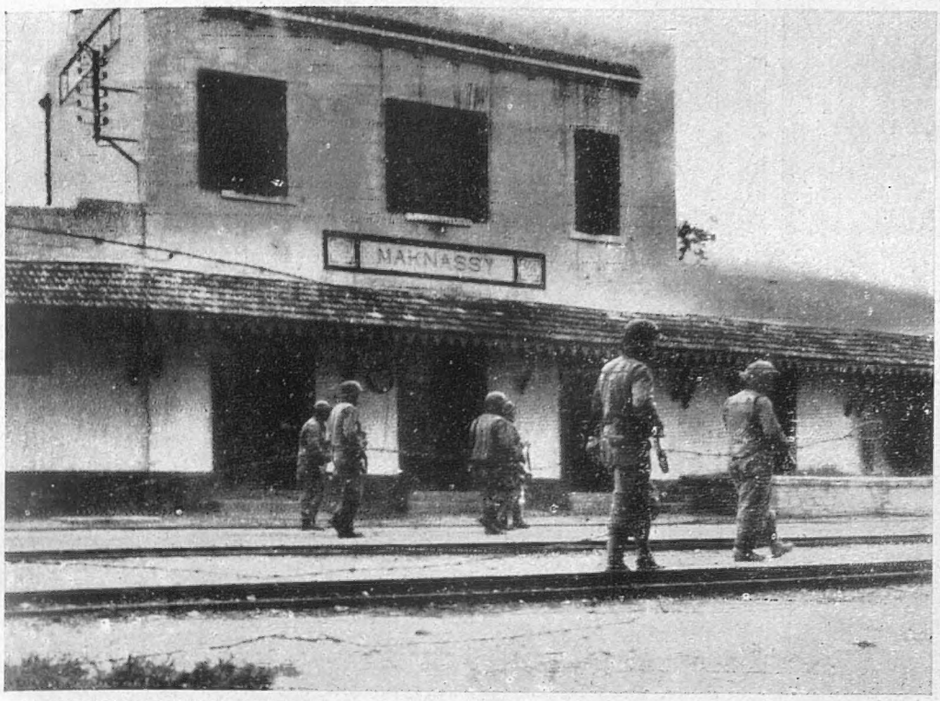
The "Five-Year" Plan.—In the fourth year of World War II, I began to keep a "five-year" diary. Why this five-year plan—which has all the simplicity of all great ideas—did not occur to me in 1939, I do not know. I regret it now. Nothing is so hard as to keep this war in wholesome perspective. Nothing helps more to that end than an exact knowledge of where we stood this day last year or the year before. Time grows cock-eyed, the years run into each other, and it requires quite a lot of trouble and research to disentangle events and dates. At such times a visit to the milestones reached in 1942 or 1941 are corrective and often encouraging. When 1943 came in, I would have prophesied confidently that March would see things marching very swiftly in Tunisia. My exuberant imagination may possibly have taken wing to the Underbelly. March is going out like a lamb, and in more ways than one has contradicted its normal promise. And in its war aspect we are now perhaps in our philosophic way pinning our faith on a *march in May*. But, with the favour of that five-year plan, the impatient diarist would be able to correct his view that "nothing ever happens." He would glance back to the space above that which he is now filling with ink and would take note that last March British air raids on Nazi war industries were (as we now judge) mere trial flights in a small way (Renault works, Lübeck). The Russians were trying to hold on to Kerch (and are now back again in those parts after liquidating some million of Germany's best troops). The Japanese had just captured Rangoon. Giraud was about to escape from France, and Derna was in Nazi hands. Between last March and March 1943 we were to lose Tobruk and win Alamein and move from Alexandria to the Mareth Line; to see Russia mop up the Nazi war machine from the Volga to the Dneiper, to see Leningrad, Moscow, Stalingrad and the Caucasian oilfields made safe for the Allies; to see the Mediterranean brought within sure and measurable certainty of becoming Mare Nostrum, to see Cologne, Essen and a dozen more keypoints of Nazi war potential laid in ruin; to see France clearly resurgent, the Balkans insurgent, the German people in the doldrums of 1918, and Hitler's raucous throat giving him peculiar trouble. Believe me, the five-year plan for diarists makes for proportion, patience, sanity and faith.

Spades are Trumps.—And spades are rare. The weather is right enough for digging and there is plenty of ground crying out to be dug. The difficulty is, the labourers in the vineyard. Positively, the man-power problem is now a facer. Even our octogenarian grave-digger (whose prime duties are unusually onerous) has more tempting man-hours offered him than he can deal with, and *my* offers he turns down with scorn. I see, before me two acres of kitchen garden to be trenched, and I stand aghast at the discovery that I am not one but five years older than I was last spring. Last year I achieved six moderately neat rows a day. This year my limit is three, before my back breaks. It will be April's girlish laughter which will hoot me off the potato-patch at the end of my long, long trick. I have seriously thought of cutting my suit to my cloth and reducing the area of cultivation. A Polish pundit encourages me to believe that the European war will be over this year. On the other hand, an American pundit told his Press conference that the war would be over in 1944 or 1945. (How do they achieve these visions? How decide that they are worth giving to the world? What bug is there in the brains of democratic pundits which induces them not only to prophesy but constantly to blather out their forecasts?) But whether the war ends this year, next year, some time or never, food will be needed in ever-increasing bulk. As the Whig Duchess wrote when inviting an old friend to her husband's funeral: "And bring your gun; *whoever dies*, the pheasants must be shot." Whoever dies or digs, the peasants of Europe must be fed, peace or war. Peace or war, we must dig to live. Root, hog or die.

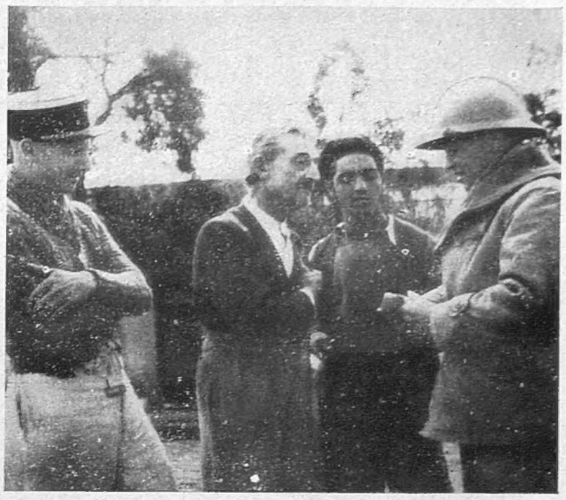
THE OLD STAGER

TUNISIA—and the Berlin Raid

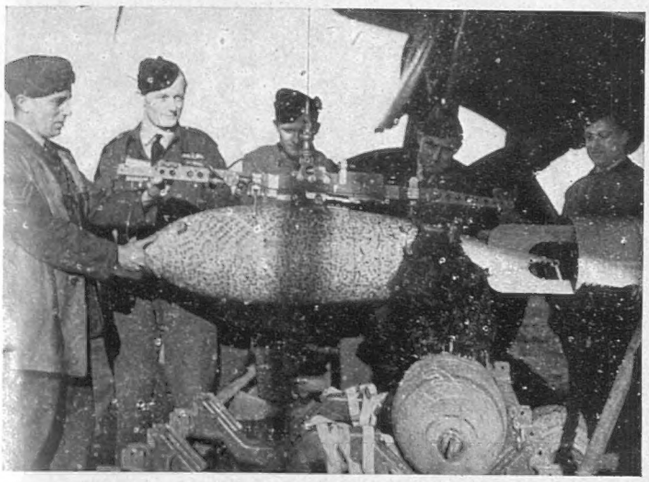
—The Latest News Pictures



THE AMERICANS CAPTURE MAKNASSY STATION IN TUNISIA: U.S. troops actually taking over the station on the heels of the retreating Axis forces. Since this radio picture was taken, they have gone on far to the eastward to close in towards Rommel's rear

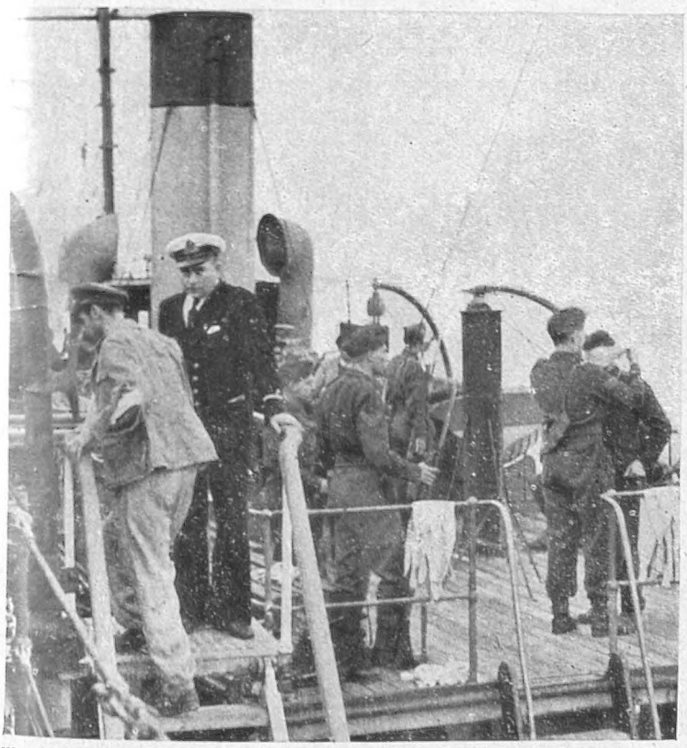


FRENCH OFFICERS QUESTION RESIDENTS OF EL GUETTAR after the fall of that Tunisian village to the Allied Forces, where some 200 prisoners were taken and between 35 and 40 enemy tanks were destroyed



THE VERY HEAVY RAID ON BERLIN, on Saturday, March 27, when over 900 tons of bombs were dropped on the German capital. This is one of the bomb-load, plastered with stamps which were contributed during "Wings for Victory" week

ONE OF THE MANY CREWS WHICH TOOK PART IN THE GREAT RAID: Second from the left is Flight-Sergeant Rawses, captain of "H for Harry," one of the Lancasters, together with his crew. They had just returned from Berlin, and this picture was taken as the skipper was broadcasting history



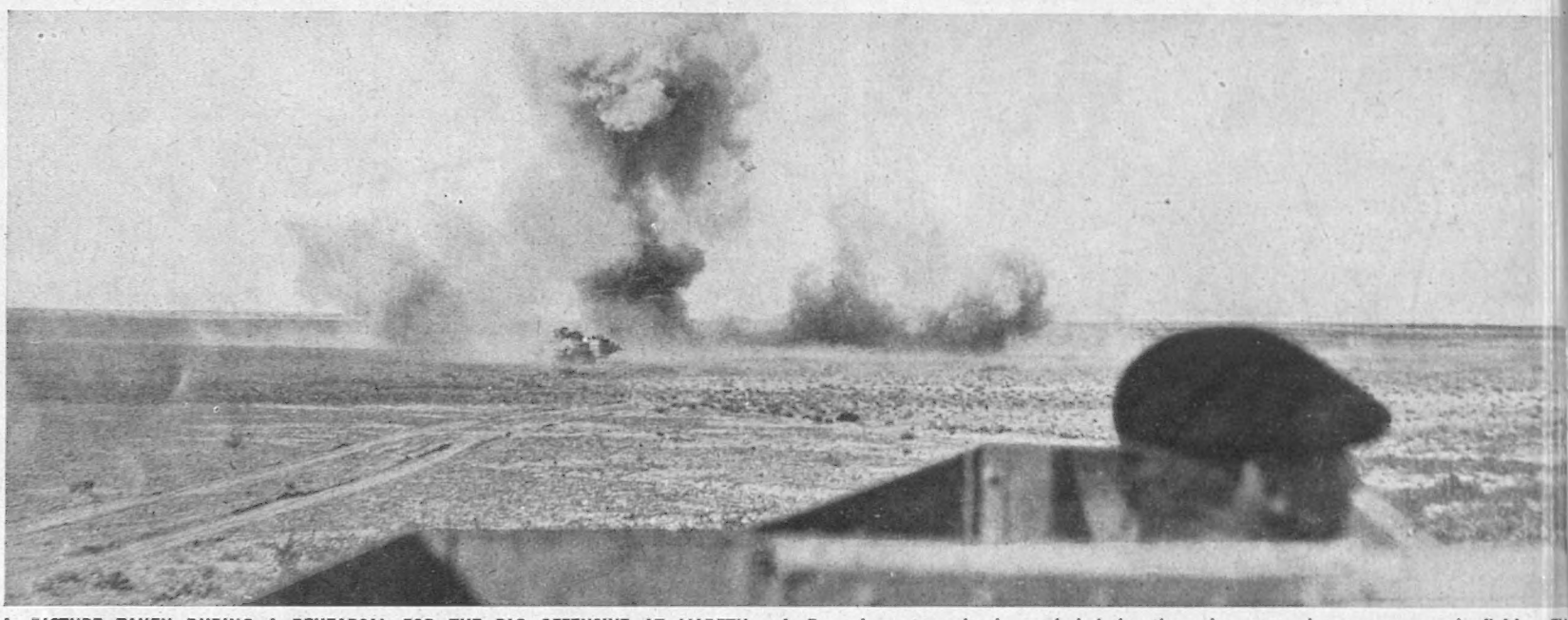
Ill-attired, dejected and blindfolded for obvious security reasons, Italian U-boat prisoners and German "Luftwaffe" pilots are here seen during their voyage to England aboard one of his Majesty's destroyers. *On left*—A tattered Italian U-boat officer comes up on deck, whilst another prisoner, a German airman, is being blindfolded. *On right*—An interesting study of Axis prisoners during the voyage: the man with his head on his hands is another U-boat prisoner

THE EIGHTH ARMY AT THE MARETH LINE

New Pictures Taken Just Before, and in the Opening Stages of, the Big Offensive in Front of the Strong German Defensive Positions

SAPPER JOHN McKAY, OF SHEFFIELD, WORKS AMID THE SPRING FLOWERS of Southern Tunisia. He has spent two years with the Eighth Army, and has laid and lifted thousands of land mines during that period

CLEARING THE PATH FOR THE EIGHTH ARMY'S ASSAULT. A Field Company of Ro Engineers are here working with a mine detector: the man in front operates t device, which records the mine's presence through the apparatus strapped on his back and the earphones; the man behind lifts the mines as detected. Coveri the whole operation is the Bren gunner, ready to deal with any land oppositio In this manner whole areas were cleared for the general offensive of the Eigh Army in front of the Mareth Line



A PICTURE TAKEN DURING A REHEARSAL FOR THE BIG OFFENSIVE AT MARETH: A Bangalore torpedo is exploded in the wire around an enemy minefield. Thi device is capable of tearing big holes out of the entanglements and thus permitting an entry for the sappers, and, later, the infantry. Flat stretches o firm ground like this are amongst the areas favoured for the enemy's minefields in the desert

THE BRITISH ARTILLERY BARRAGE OPENS UP DURING THE NIGHT JUST BEFORE THE OFFENSIVE. As at El Alamein, General Montgomery concentrated a great number of guns for the assault on the Mareth Line fortifications. The attack was made on a six-mile front, between the sea and the main road which strikes north from Medenine village to Mareth itself and then on to Gabes. All types of guns joined in the great barrage, to prepare the way for the later infantry attacks

1. FINISHING OFF AN ENEMY TANK NEAR MEDENINE: Crouching low, two men run forward to place the charge in the vehicle; a third member of the party remains on the alert to give covering fire with a Bren gun

2. THE ENEMY TANK IS BLOWN UP. With a terrific roar and blinding flash, the gun turret sails into the air and bits and pieces fly in all directions

3. THE ENEMY SPOT THE OPERATION, and open up on the demolition party. These jobs are carried out by the R.E.s: the tanks must be thoroughly destroyed to foil any enemy attempts at subsequent recovery

HOW THE FIGHTING MEN GO INTO ACTION DURING THE TUNISIAN BATTLES: Men from the Home Counties, supported by a Scots Regiment, approach an escarpment in Bren-gun carriers

GURKHAS, TOO, ARE FIGHTING ON THE TUNISIAN FRONT, and have helped the Eighth Army to pierce the Mareth Line. These troops from India have completely lived up to their fine reputation: their methods have proved very effective in the hilly country around the Line, where they have been employing their deadly special weapon, the kukri, to great effect. This picture was taken as a body of these sturdy soldiers emerged from a smoke-screen at the summit of a Tunisian hill

THE SCENE BY NIGHT DURING THE ARTILLERY BARRAGE: A medium gun of the Eighth Army turns darkness into light with its lightning flashes as it opens up on the enemy

THIS MAN IS A "GAP-MARKER." His job is to mark out the routes through a minefield as these are cleared by the Royal Engineers. This is done by means of shaded electric torches, screened so as to be invisible from the air or from enemy observers on the ground. Flags mark the paths by day, lamps by night, so that the infantry can follow without confusion

THERE'S ALWAYS "DEVIL'S ISLAND"...

A Suggestion for Dealing with War Criminals after the German Break-up

By FERDINAND TUOHY

A POLISH writer, F. R. Czarnomski, has put forward a plan for the confinement in penal servitude overseas of all the officers of the German Army. He estimates it would mean the incarceration of 250,000 men. Mr. H. G. Wells has backed the plan, which is tantamount to saying that it will attract more notice round the world than normally would be the case.

There can be no question of justification. Czarnomski is moved to the depths of his being by the imagination-defying dreadfulness that is being perpetrated on the Continent. Just over there, at Calais, history's greatest horror commences, and Czarnomski fears, as do so many of us, that if the Germans have another three years on the Continent, there will be little of it left worth rescuing; that too much of it will resemble a cemetery peopled by gaunt and stumbling human wreckage.

Can nothing be done to call the fiends to a halt *now*?

Well, first there is room for an interpolation. There are two distinct schools of thought about the wisdom of proclaiming what you are going to do with the German criminals. One school is for shouting it day and night at Germany, in the hope that, military events aiding, the proposed localisation of punishment will tend to break away the mass of Germans from the Nazi Party. It may even (as our Pole thinly hopes) arrest the Nazi hand in its current devilishness. And it will serve to keep our politicians up to scratch—for they may as well know that quite distinguished citizens have little faith in their professed plans for punishing the guilty.

The second trend of opinion suggests that by all this "what we 'll do" talk—public speakers are fonder of it than the Press—we are only adding to the misery and murder now, while building up a mint of difficulties for ourselves in the future. In effect (runs the argument) what is Hitler's answer? He is pulling into Germany from the occupied countries men, many of them prominent, whom he

will threaten to execute in masses unless the Allies undertake not to punish Germans who fall into their hands.

It is a difficult problem which might best be met in the future by our orators piping down.

To return to the Czarnomski plan, its author rightly asserts that according to the laws of nations (1907 Hague Convention, etc.), the only body of men in Germany who are legally responsible for what happens in the conquered and occupied countries are the officers of the German Army. He might have instanced how, on a few rare occasions, the Army stopped Gestapo and Waffen S.S. frightfulness on the ground that it, the Army, was responsible. All Army officers must well know how they should treat conquered civilians; instead, their generals go the gamut of abomination by signing the death warrants when hostages are shot in reprisal.

Therefore, an ultimatum is proposed as follows:

1. Unless, within a specified time, the officers of the armed forces of Germany (this evidently includes *Luftwaffe* and Navy) make themselves responsible for the safety and property of civilians in the occupied countries, the Allied Nations shall pass sentence of penal servitude for life on all officers of the German armed forces, from the rank of cadet to Field-Marshal. 2. That immediately after the unconditional surrender of Germany, the armed forces of the Allies shall seize all such officers and remove them to forced labour camps in such overseas countries as shall be specified, to be detained there for life.

All this to be without prejudice to the punishment of the Nazi criminals who are already listed with the Allied Governments in London, to the tune of 60,000.

The first snag that strikes one is that if German officers learn during the war that, Germany losing, they will spend the rest of their lives as convicts in filthy climates, this will only egg on the "proud Prussian spirit" in them, with the effect that they will behave more cruelly than before. A second snag lies in the proposal to detain for life 250,000 convicts in overseas countries.

One may well ask—where?

Who would take, even in small quantities, the kind of convicts these men would be? Hard, Nazified creatures for ever trying to escape and making hell for their gaolers? Think of the number of gaolers there would have to be, and the expense entailed by the closest watch on what would equal, numerically, six or seven Army corps. No matter how one parcelled out this huge body of the officer caste, it would develop into a poison wherever it found itself. It would constantly escape and breed outside, with the sequel that after a decade, or two decades, Nazi-Prussian colonies in embryo would be springing up in place after place overseas.

You have a pointer in what has transpired with the *Graf Spee* crew. We scoffed when Hitler ordered 900 into internment, but what has that internment amounted to? In parts of South America bands of these men have taken root. Admittedly, the Army officers would be more closely guarded, but for how long? And might not the guard vary in the overseas countries later to be specified? But, above all, who would provide these greater or lesser convict settlements? It is one thing to permit prisoners of war to stay on in overseas territories, as numbers of Italians will probably be allowed to settle in Australia; quite another matter to take on ex-German officers in bulk and as convicts.

I cannot see the British Commonwealth having anything to offer in the way of convict sites, nor, indeed, any other Empire—French, Dutch, Portuguese or Belgian, with one possible exception, to which I shall come. North America has nothing to offer, and it would be asking for trouble to locate penal colonies in South America.

As I recall, there was difficulty in finding penal settlements before this war. Franco-Spain could alight only on Villa Cisneros, in the Rio de Oro, a relatively tiny affair. People will no longer tolerate convict settlements in their midst, spreading, as they do, every form of foulness and corruption. Yet there is, all the same, one place where there might be something doing on a very limited and exclusive scale—"Devil's Island."

This implies the whole French colony of Cayenne, which has just come over to General de Gaulle (while also, apparently, taking a Giraud Governor). The point is that the French are sick of Cayenne as a penal settlement, which is all that it is, and about all that it ever can be for whites. Cayenne is surrounded by swamp and jungle, and by sharks, is laden with yellow fever and other pestilences, and hasn't enough products to pay its way. The place rapidly brings men down to beasts of vice and tragedy. Not one in a hundred who returns to France is of any use—in fact, most proceed to be pests in the homeland, and that was one reason why Herriot wanted to take action some years ago. He wanted to close Cayenne as penal colony, and as it can be very little use for anything else, one cannot help thinking that a deal might be struck with the next Republic.

The maximum number of convicts which Cayenne can take is about 6,000, of which only some 150 are on Devil's Island, the majority being at St. Jean de Maroni, on the mainland. Of course, escapes go on all the time—there is a fixed rate, payable to warders who are muchly ex-Colonial Army men. But it should not be beyond the acumen of the Allied Nations to organise a fairly watertight guard system based on such wartime hangovers as mine-fields, air and bomber patrols, machine-gun nests and light naval forces.

If one reduced Czarnomski's plan from one of convict settlements to take 250,000 arrogant men to a scheme for one convict colony capable of looking after, say, 6,000 of the Nazi and, particularly, the Prussian élite, then, I suggest, we might be getting somewhere. For the value of Cayenne would reside in its being always there, ready to take criminals who escaped the death sentence, and Germans—of whom there should be quite a few—who proceeded to make themselves dangerous in Germany in the days of peace.

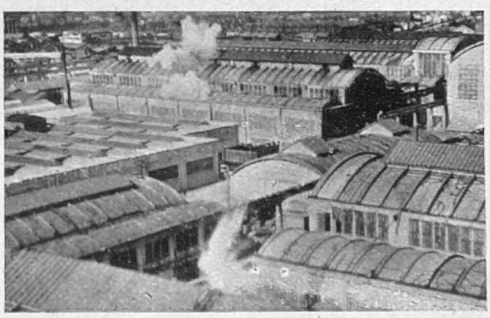
To have the degradation and physical abyss of Cayenne constantly hanging over proud Prussians and Nazis would, for them, be worse than death, as a punishment. And what a pillory, what a showing-up, what a reminder it would be, into the future years! A real, safe prison for responsible German executives, big and less so, would serve as a lasting example: not the martyr's crown conferred by the firing-squad, but just plain hell on earth, as they 've given countless others.

I am fairly sure the French would rise to it in the peculiar circumstances, and the native population could be well recompensed—or removed, for there aren't many of them. Cayenne, I submit, is a feasible plan that could be held hard and fast; which is something, in view of the widespread belief that the latest breed of German war criminals will contrive to "slip through our fingers," as their fathers did in 1919.

There is only one other spot that I can think of which might serve as a safe penal colony for Germans, and that is somewhere around the Amur. The Russians could look after Nazis in the tried and tested prison-land of Eastern Siberia. Escapes would not be easy, the wardering would be above reproach, and Siberia could take ten and twenty times Cayenne's consignment, and barely notice it.

HITLER IS RECRUITING THE FANATICAL GERMAN SCHOOLBOY FOR HIS NAVY: So acute is the man-power problem becoming in Germany that schoolboys are now being recruited into the German Navy. In these two pictures, just received in London from a neutral source, the extreme youth of the boys may be seen. They are, at this moment undergoing sea-training and anti-aircraft instruction on coastal patrol vessels. The boy on the left is a "help-soldier" undergoing training on a warship; the one above is a very young naval recruit handling the controls of an A.-A. gun on a coastal vessel

TAKEN BY SURPRISE, THE FRENCH WORKERS ARE WALKING AND CYCLING AWAY FROM THE HUGE SHOPS just as the bombers come over at "nought feet" to open the attack. The first bombs are already penetrating the roofs of the plant buildings (see the two bursts at the top of the picture)



SKIMMING THE ROOFS OF THE WORKSHOPS, a Mosquito has just planted its bombs on the target

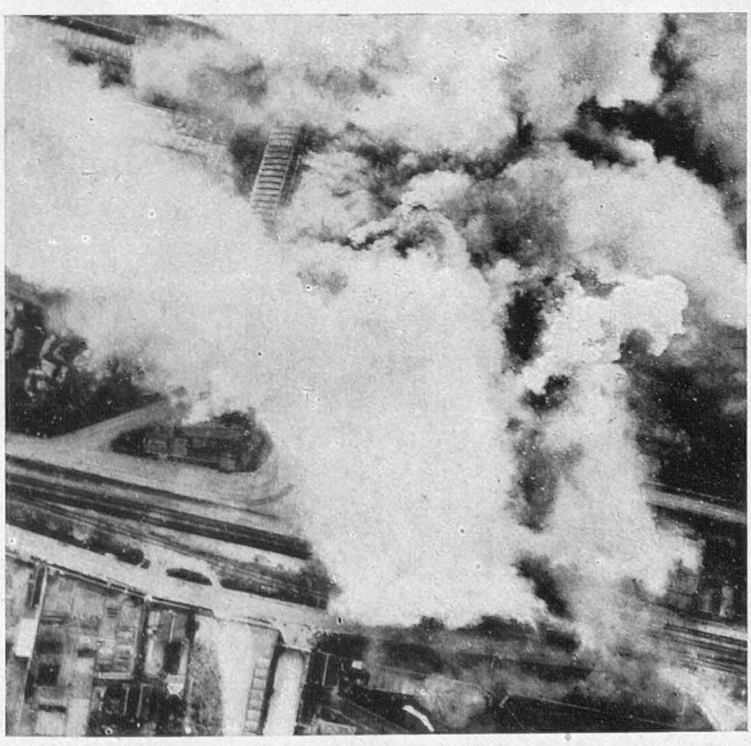
DAYLIGHT ATTACK by MOSQUITOES

The Assault on the St. Joseph Locomotive Works at Nantes by Bomber Command, R.A.F., on March 23

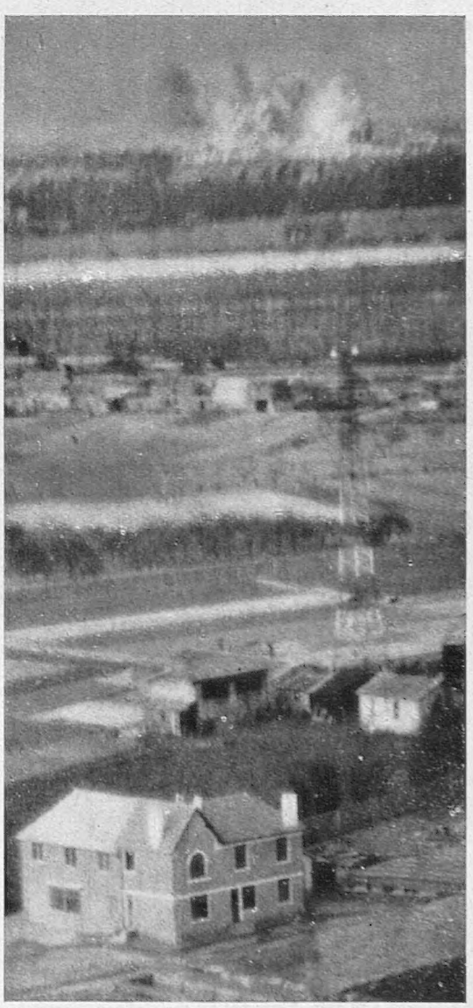
On March 23 Mosquitoes of the R.A.F. Bomber Command carried out a low-level attack on the St. Joseph Locomotive Works at Nantes, in France. They returned to their base in England with a picture record which provided convincing evidence of the success of the operation. The Works (one of the principal French locomotive centres) normally employ about 4,000 people: it is known that they are producing steam and electric locomotives for the German railways, and that the latter are desperately in need of this French output as a supplement to their own. The factory is also capable of making tank turrets and gun parts.

The workers were just leaving the factory when the first of the Mosquitoes swept over and released their bombs plumb on the target. The pictures brought back show that the Germans must have been taken completely by surprise, and that the first waves of bombers were flying at roof-top height. They are among the most dramatic pictures yet taken during a daylight bombing operation by the fast Mosquitoes, which were led on this occasion by Wing-Commander W. F. Shand, D.F.C., and Flight-Lieutenant W. W. Blessing, D.F.C.

The bombers attacked in two waves—the first from 50 ft., and the second from 1,000 ft. The evidence of the cameras (as shown in the pictures given here) confirms the crews' reports that many bombs hit the target.



WITHIN A FEW MINUTES OF THE OPENING OF THE ATTACK, the target area was almost completely obscured by smoke as the bombs started big fires



THIS FINAL SHOT was taken as the attacking aircraft headed for their base—still roof-hopping. In the distance is the vast column of smoke in which the Works are shrouded

THE ADDITIONAL ARMAMENT IN THE AMERICAN FLYING FORTRESSES TO REPEL FRONTAL ATTACKS BY ENEMY FIGHTERS, which is one of the reasons for the recent amazing successes by U.S. bombers over Germany and France. The gunner above is operating the two machine-guns now installed in the nose of the "Delta Rebel," after the return of this Fortress from the Wilhelmshaven raid on March 21, when twenty-nine enemy planes were destroyed: it was this aircraft's twenty-first operational flight from its base in Britain

The War by Air

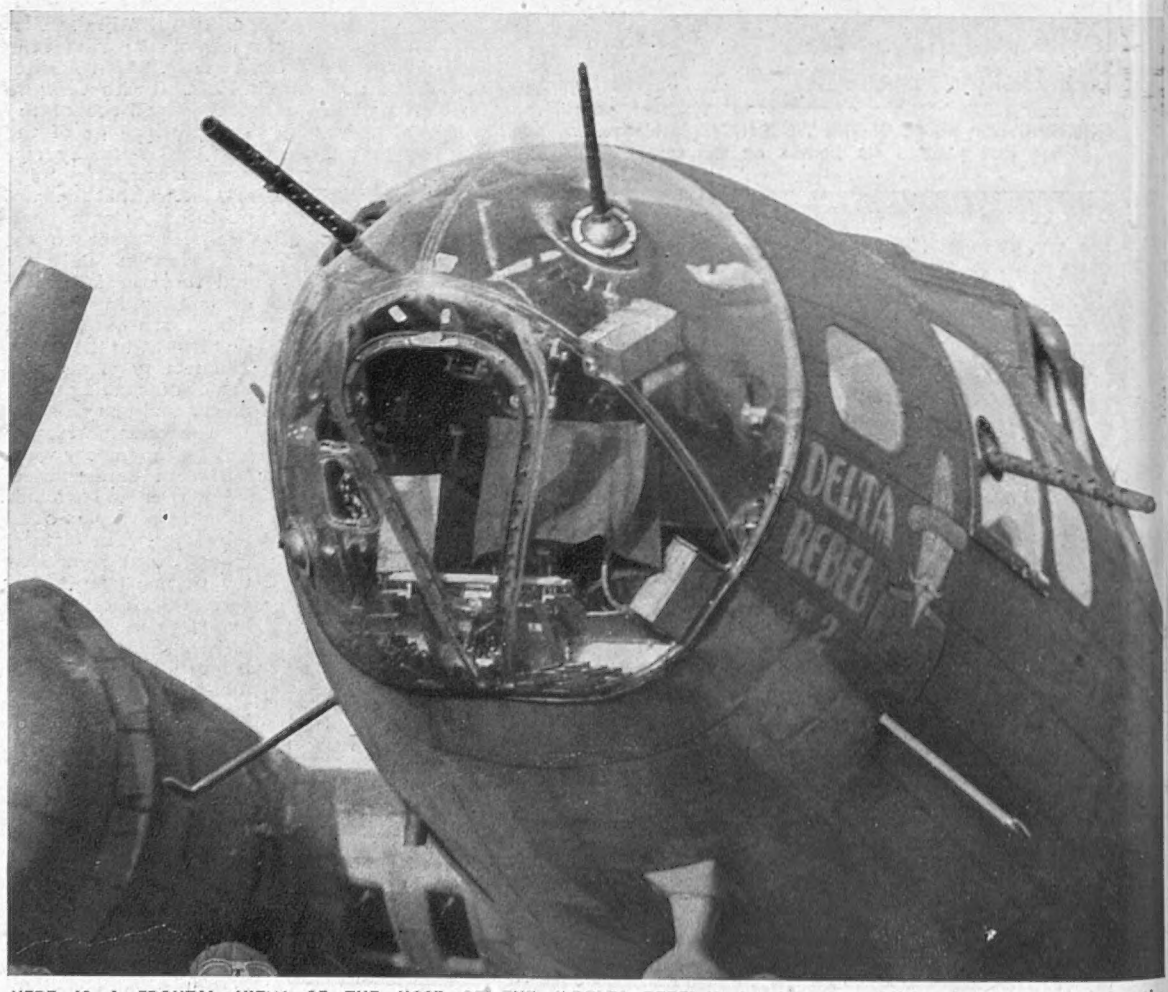
BOMBERS v. FIGHTERS

How the Flying Fortresses have been Further Armed for their Daylight Assaults on Germany

GREAT interest has been aroused throughout Britain concerning the striking results of bombing raids over Germany and France by Flying Fortresses operated by the U.S. Army Air Force from land bases in this country. Recently—in addition to causing great devastation by bombs—the Fortresses have also claimed great numbers of German fighters shot down. During the raid on the German U-boat yards at Vegesack, for instance, fifty-two enemy planes were destroyed during the bombing operations, twenty were "probables," and another twenty-three were damaged. At Wilhelmshaven, during the bombing of the naval base, another twenty-eight enemy planes were destroyed, nine "probables" were claimed, and another nine damaged. American bomber losses, during the two raids, were only five.

The two pictures reproduced on this page show one of the reasons for these great figures of enemy losses. When the Flying Fortresses first began to operate it was, in the opinion of the R.A.F., anything but a "Fortress." It possessed no power-operated turrets such as most British bombers then possessed, and its armament was principally concentrated in a turret above and two "blisters" in the side of the fuselage, with manually-operated guns. Very soon it began to sprout more guns—all over: top and tail protection was increased, the "blisters" were strengthened, and an inverted turret was also built below, to protect the aircraft's underside. But still the giant bomber remained vulnerable to a frontal attack—and this "Achilles' heel" was soon discovered by the German fighters.

To-day, this lack of frontal fire-power has been remedied: in addition to the terrific fire-power which the Fortresses can bring to bear on an attacking fighter, there is now not a single blind spot. In order to cope with a head-on attack, two machine-guns have been installed in the aircraft's nose: thus, from every angle, the Fortress is capable of pouring a stream of lead into the enemy.



HERE IS A FRONTAL VIEW OF THE NOSE OF THE "DELTA REBEL," showing the additional guns carried by the U.S. Fortresses. These aircraft are now completely defended from every possible angle: hence their great successes recently against German fighters, numbers of which are shot down during every American raid

AN INDICATION OF THE GREAT NUMBERS OF HURRICANE FIGHTERS NOW BEING TURNED OUT IN BRITAIN. This picture was taken at a factory in the Home Counties where women, in large numbers, are assisting in the production of this powerful aircraft. It will be noted that the engines of the Hurricane are now installed even before the fuselage covering is completed: when the aircraft leaves this shop, it only remains to bolt on wings and propeller and the machines are then ready for the test pilots. Scores of them are to be seen in this small corner alone

Major-General Eaker, who commands the U. S. Army Air Force in Britain, recently stated (in connection with the raids on Wilhelmshaven and Vegesack) that nearly 1,000 air crew members from all the machines employed on each raid were interrogated. Before a claim was allowed, the crew had to see the enemy plane crash, break up or catch fire; or the pilot bale out. In fifty-one raids the Americans claim to have shot down 356 enemy aircraft.

General Eaker has also given some interesting details of the manner in which his bombers operate. They fly over the target at between 20,000 and 30,000 ft., in temperatures of 40 to 44 degs. below zero. The crews are specially protected against frostbite; in addition to the armour of the aircraft itself, the crew are also protected by "personal armour."

A WOMAN WORKS ON A HURRICANE. Mrs. W. Miles, aged twenty-eight, a dressmaker before the war, is here shellacking the sides of the engine leads

THE FIGHT FOR AIR SUPREMACY IN TUNISIA: This big aircraft (which appears to be a Liberator Bomber) had been much damaged around its nose during a sortie over enemy territory in North Africa. Apparently it had been struck by an anti-aircraft shell right forward of the pilot's cockpit and much damage caused to the "glass-house" and underside of the fuselage. Despite its battered appearance, the American Servicing Unit will soon have the giant bomber flying again

On left—THIS IS THE U.S. NAVY'S MIGHTY NEW LAND-BASED PATROL AIRCRAFT, the Vega PVI, a nautical version of the Vega Ventura bomber now being used from Britain for raids over Germany and France. The PVI has been hailed as a new scourge for the U-boat: it carries depth-charges or torpedoes. It is the first submarine-buster in production to fill the Navy's need for a twin-engined, land-based aircraft with plenty of range plus plenty of "punch." Extra tanks are fitted under the wings to carry additional petrol when the aircraft carries out long flights

The HOME FLEET, and its Role in Wartime

"The Most Important Single Force which the Navy has Afloat"

By MARTIN CHISHOLM

THERE are many arresting similarities not only in the pattern of sea warfare in various epochs but also in the public reaction to that pattern. In recent days, for instance, the Home Fleet has been in the public mind owing to the announcement of a change in its command—the appointment of Admiral Fraser to succeed Admiral Tovey as Commander-in-Chief. In the main, however, owing to preoccupations with the ever-present menace of the U-boats, and to the absence of any major engagement between heavy surface units in home waters, there has been a tendency to overlook the functions of that Fleet and to forget the great issues which depend on it.

This forgetfulness of the most important single force which the Navy has afloat is no new thing. Despite such actions as those of the Dogger Bank and Jutland, there was at times a similar forgetfulness between 1914 and 1918, and a comparable situation has arisen often enough throughout our naval history.

The main reason; since the days of the *Bismarck* engagement, so little has been heard of the Home Fleet, is that its chief and

ADMIRAL SIR BRUCE A. FRASER, the new Commander-in-Chief of the Home Fleet

ADMIRAL SIR JOHN C. TOVEY, who has gone from the Home Fleet to the Nore

all-important task is to contain an enemy force which so far has resolutely refrained from giving any opportunities of battle. The Home Fleet's task is to watch and forestall every enemy move, hoping always for the opportunity of containing the enemy in the most effective way of all—by destroying him in battle.

The German ships of to-day were all designed largely with the function of ocean raiders in view rather than as units of a balanced fleet meant to work in action together. This has been one factor in influencing German naval policy. In an endeavour to offset their inferiority at sea in the last war, the Germans for a while tried by a policy of attrition to whittle down the strength of our Grand Fleet by seeking to become engaged with isolated squadrons against which they hoped to be able to mass superior, or at least equal, forces. This policy was not successful in the war of 1914-18. To-day it is unlikely even to be attempted because of the higher degree of disparity in strength between the two fleets.

THE KING'S RECENT VISIT TO THE HOME FLEET. The retiring Commander-in-Chief, Admiral Sir John Tovey (who has now gone to the Nore), greets his Majesty on the deck of H.M.S. "King George V"

AN IMPRESSION OF THE TERRIFIC MIGHT OF THE BRITISH HOME FLEE capital ships, which, now, are confined to harbour owing to the existence of this ve carriers; the 31,000-ton Queen Elizabe

This fact, however, increases, rather than decreases, the difficulties which the Home Fleet has to face. While on the one hand it must be prepared at any moment for a German sortie in strength, however remote such a contingency may appear to be, on the other it must be ready to forestall

THE KING AT AN ENSA SHOW: With Admiral Sir John Tovey on the right, and Captain E. D. B. McCarthy, D.S.O., Captain of the Fleet, on the left

any attempt of single units, or of perhap a couple of ships, to break out on to ou supply routes either in the broad water of the Atlantic or in the Arctic Sea. Th sortie of the *Bismarck* and *Prinz Euge* was a case in point. More recently in th Arctic, at the beginning of the year German heavy units made a rathe faint-hearted attempt to intercep a convoy bound to Russia. Th story told of that engagement was largely the story of the great gallantry of the destroyers of the escort force which fought off the German attempt until heavier British units arrived. Those heavier units which in the upshot decided the issue, were units of the Home Fleet.

This is a point which is very often lost sight of. Every convoy to Russia, every important transportation of troops across the Atlantic, involves far more than the provision of surface and air escort forces to deal with attack by plane or U-boat. It demands the unfailing presence in some strategic situation, perhaps far from the convoy itself, of fleet units. Every such convoy, in fact, involves a

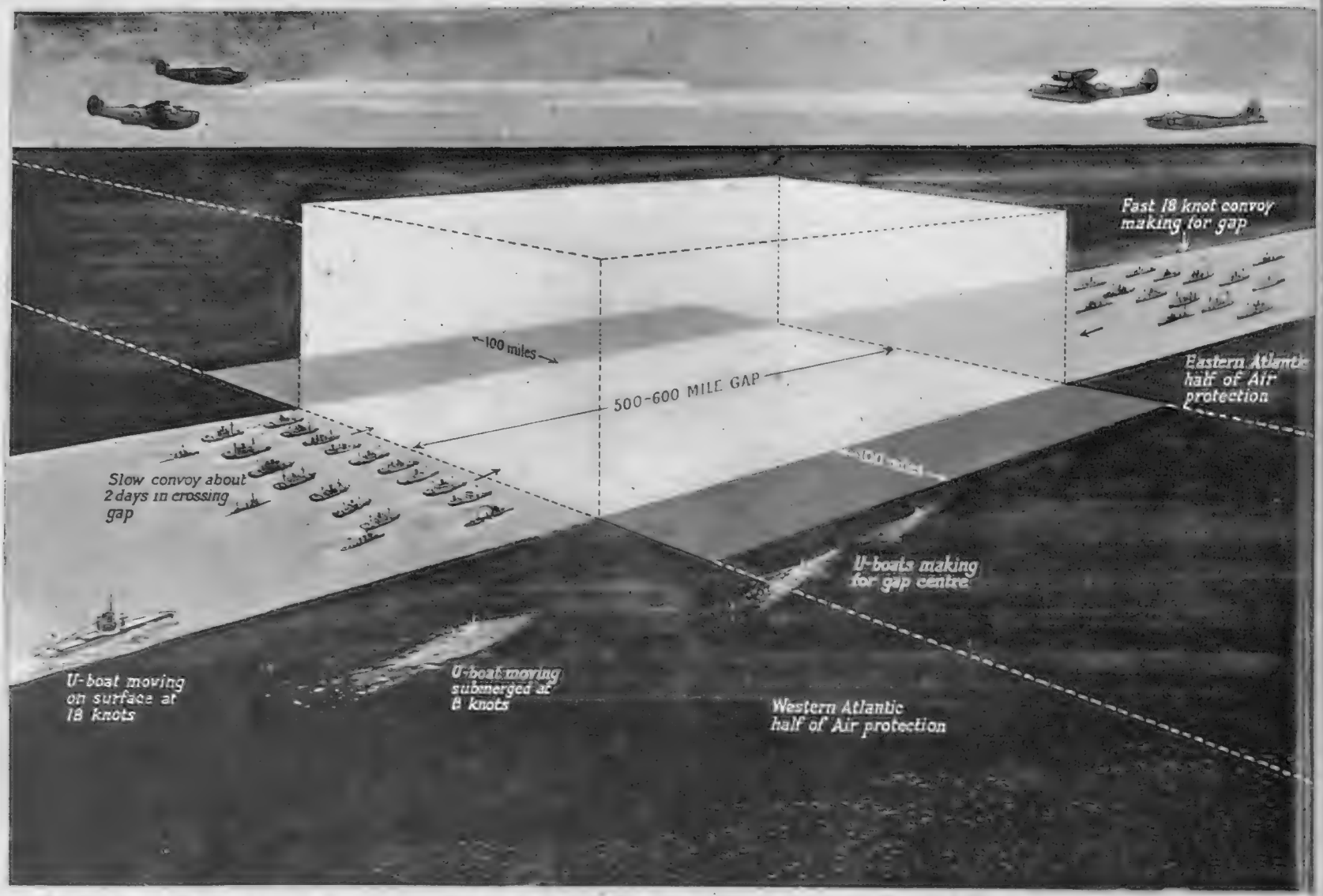
THIS IS THE FORCE WHICH "CONTAINS" THE GERMAN AND ITALIAN NAVIES, but which at any moment may have to sally forth into grim battle with the enemy's potent arm. Individual ships are not shown in this drawing, only classes being indicated: these are, from the left, the Illustrious class of 32,000-ton aircraft-class of battleships; and the 35,000-ton battleships of the King George V class—*Drawing by Montague Dawson*

major fleet operation. It is just because the Fleet has been there in substantial strength that up to now we have been spared the disaster of a major German break-out against these convoys. And, again, just because there has been no such major sortie, the Fleet has not come into the news.

I have myself sailed several thousand miles in a British battleship on just such an operation as this. It provided neither news nor incident. There would probably have been both in plenty had we not been where we were, and the news would not have made good reading. This uneventful operation was, in fact, pretty typical of what is going on all the time. It was a fair sample of the work the Home Fleet is doing—work monotonous to a degree, but absolutely vital in its importance.

While the task of the Fleet, as things stand to-day, provides little excitement and less news, yet it is, in fact, providing the bulwark behind which the whole of our other naval operations over many millions of square miles of water are being carried out free from interference by German surface craft. Without the presence of that Fleet where it is most needed the picture would rapidly become gloomy in the extreme. The Fleet is hoping against hope that one day the enemy will give it the chance for battle. Meantime, it has to be constantly ready, at the very top of its form, to deal with possible sorties which have up till now failed to materialise.

A GROUP TAKEN ABOARD A DEPOT SHIP DURING THE KING'S VISIT TO THE HOME FLEET. Admiral Sir John Tovey is on the King's right; on his left is Rear-Admiral I. G. Glennie (Rear-Admiral, Destroyers). Captain Pizey, C.B., D.S.O., is second from the left. The three others in the group are Staff Officers



THE DANGER AREA IN MID-ATLANTIC, WHERE THE U-BOATS HAVE SCORED THEIR BIGGEST SUCCESSES: The 500-600-mile gap where air protection is difficult unless it come from ship-borne aircraft or helicopters. This diagram also indicates another aspect of the convoy problem—that of speed: on the surface at night, the U-boat, with its 18 knots, can easily keep up with and overhaul the 12-knot merchantmen—*Drawing by H. P. Burton*

The THREAT to the CONVOYS

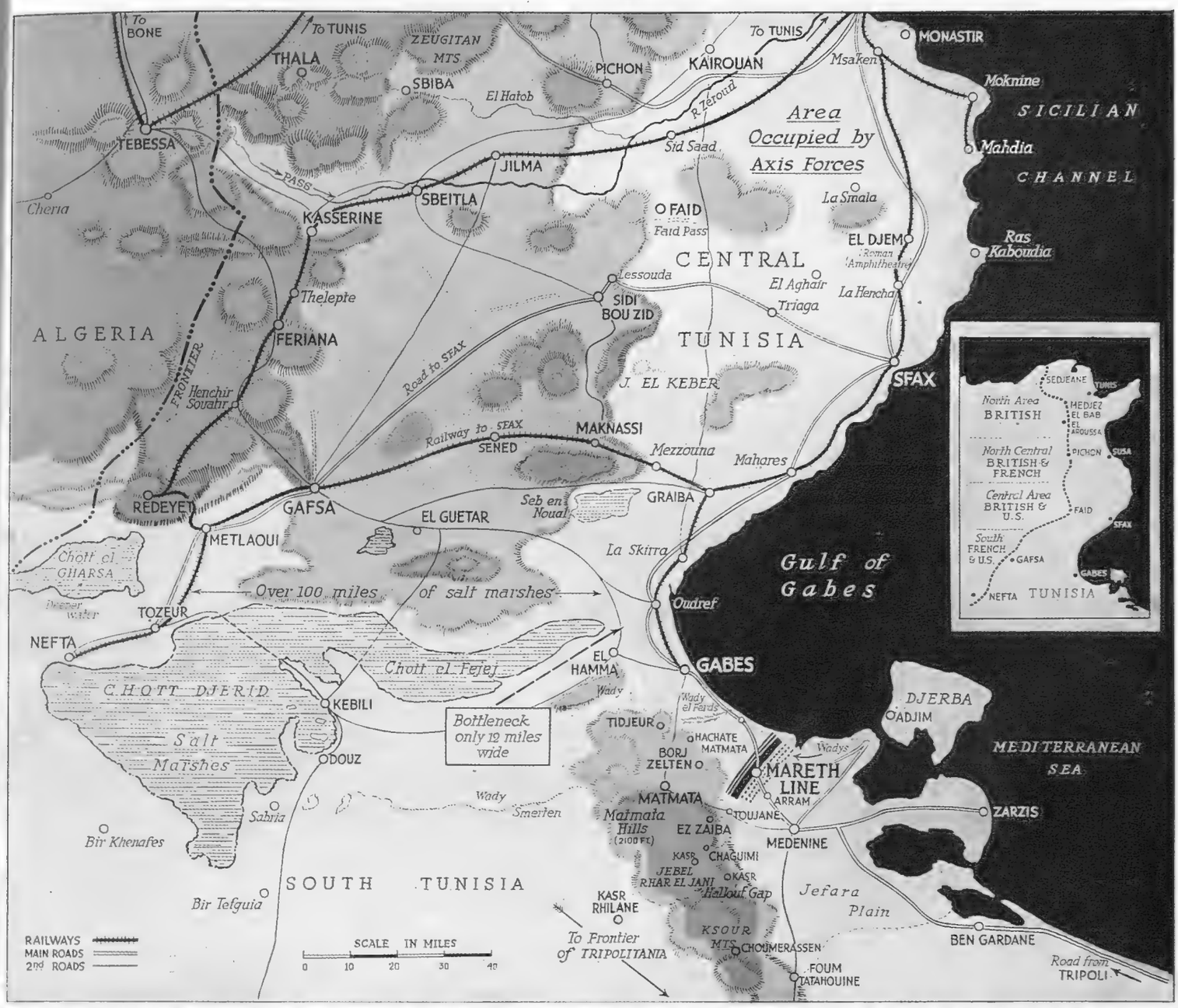
The Vital Gap in Mid-Ocean Which Must be Guarded by the Allied Air Forces Against the Massed U-Boats

One of the great difficulties in solving the U-boat problem has been the big gap in the Atlantic where our convoys must, for two days on end, traverse an area where aircraft protection cannot be given to them, owing to the great distance from both Britain and the United States. The U-boat, when submerged, has only a speed of 8 knots. But by night, when the submarine can surface with but little danger, it can achieve 18 knots. Thus, by the next day, it is again up with the convoy, and again ready to discharge its terrible missiles at the exposed merchantmen. According to Admiral Sir Charles Ramsey (now in the U.S.A.) some of the U-boats operating in the Atlantic are known to have a speed, on the surface, of at least 20 knots. This was more than the *maximum* speed of corvettes and other escort-craft produced by the Allies at the beginning of the war!

Despite the employment of long-range aircraft over the Atlantic—Catalinas and Flying Fortresses and Liberators—the distances involved are so great that the 500-600-mile gap in mid-Atlantic is still unbridged. It is necessary to cover this gap, and also to "saturate" the air over a 200-mile-wide strip—100 miles on each side of the convoys. Not until this has been done will our convoy losses fall. It is thought that recent talks in Washington have been directed towards this, and allied, problems.

EIGHTY-THREE DAYS ADRIFT IN THE ATLANTIC! Three survivors of a merchantman on their raft just before being picked up: After their ship had been torpedoed by a German submarine, these three men (with two others) took to a raft: here they lived for eighty-three days before being rescued by a U.S. Navy patrol boat. The three men who survived were Dominic Izzi, of Massachusetts, and two Dutch companions, Nick Hoogendam and Cornelius van der Slot. The other two American seamen died on the raft and were buried at sea. The survivors lived on fish, birds and rain-water, and even lassoed a shark. All three were reduced to skin and bones by hunger, thirst and exposure; yet they still had strength left to board the patrol boat. At first they had to be fed slowly with slops, like babies, and under medical supervision; but they are now recovering in America after their unprecedented, terrible experiences. Dominic Izzi, in the above picture, is feebly raising his arm to greet his U.S. rescuers

A NEW NAVAL LIFE-RAFT to assure survival of merchant seamen after the sinking of their ship: Designed to help seamen cast adrift at sea after the torpedoing of their vessel, this new raft carries a complete equipment, which includes radio, smoke signals, food, sails and water-proof suits. It is being produced in the U.S. as a replacement for the old-type raft which gave little but support, and which carried but small quantities of water. The picture above (just received by air mail) shows the raft being demonstrated in the Potomac River at Washington



A SPECIAL "SPHERE" MAP SHOWING THE REGIONS IN CENTRAL TUNISIA WHERE THE DOUBLE ATTACK WAS MADE ON THE AXIS FORCES: The Eighth Army launched its offensive against the Mareth Line, attacking on a six-mile front between the sea and the Medenine-Gabes road; at the same time, American armoured forces pushed forward through Gafsa towards Maknassi and the sea. In this map are shown the hilly districts and the marshes, the roads and railways which will all play a considerable part in the campaign. The little map inset shows the whole battlefront, as it existed at the opening of the battle

The Battle for Tunisia

The FIGHTING AREA around the MARETH LINE and GAFSA

Where the Eighth Army and the American Forces have Opened their Offensive

At the beginning of last week—as was dramatically announced by Mr. Churchill during his broadcast speech—General Montgomery launched his long-expected offensive against Rommel's Afrika Korps in Southern Tunisia. The attack was opened on a six-mile front between the sea and the road; and, at the same time, the Americans thrust towards Maknassi and Gabes.

The special map above shows the vital areas involved in these latest onslaughts by our armies. Away to the south-east lies the Mareth Line: maybe this is not as strong—in itself—as many may have thought; but, owing to the nature of the surrounding terrain, General Montgomery chose to bring up *all* his resources before attempting to break through. To the west of the Line itself, the Matmata and Ksour Hills form a chain of natural defences: whilst, to the north-west of these again lie the Salt Marshes, which make outflanking movements most difficult.

The strategy of the Allies is easy to see: to pen Rommel into an area bounded by the railway line from Gafsa to Graiba on the north, and then to push simultaneously from west and south, squeezing the enemy into a smaller and ever smaller area until, at last, there remains only the sea between the enemy and destruction! This, of course, implies an ability on the part of the Allies to hold off von Arnim's forces in the north from coming to the succour of Rommel in the south. It also implies a capacity on our part to deny to the Afrika Korps free movement northwards up the "corridor" indicated in the smaller inset map above. The outcome of all these things we shall in all probability learn very soon!

On right—**WHAT HAPPENED AFTER ROMMEL LAUNCHED HIS ABORTIVE ATTACK on the Eighth Army in the Medenine region.** On March 5, realising that a heavy onslaught by our forces was imminent, Rommel tried to put the Eighth Army "on the wrong foot" by launching a strong attack against our positions in the vicinity of Medenine. One battery alone of a British anti-tank regiment destroyed five of the new Mark III tanks which the enemy is now using, and the total number of enemy fighting vehicles knocked out was fifty-two—including eight of the newest type. The attack failed, and the Germans were forced to withdraw towards the hills to the north and north-west of Medenine. This picture was taken after the abortive offensive was over: it shows three enemy tanks in one cluster burning after having been knocked out by British guns

(Further pictures of this same affair will be found on pages 14-20 of this issue)

HOW THE EIGHTH ARMY BUILT THEIR OWN ROAD INTO TUNISIA—to pave the way for the pursuit of the Afrika Korps. The British spearhead was cut off from the main body after the rains had come in Tripolitania, and remained cut off until the sappers had built a causeway across the flooded wadi, and then allowed the whole army to cross. The sappers worked day and night on the construction of the bridge, with gunners and infantrymen to protect them under heavy attacks by the "Luftwaffe" which bombed them heavily. That portion of the Eighth Army which had already crossed into Tunisia had a very hard time of it for a whole week before the remainder could come up to reinforce them—*Drawing by W. G. Whitaker*

The Battle for Tunisia

ROMMEL'S COUNTER-THRUST INTO THE MEDENINE AREA

Before the Great Offensive by Montgomery on March 20

After Rommel had been ejected from Tripolitania, the spearhead of the Eighth Army—an armoured regiment, with infantry of the Buffs and gunners in support—crossed the frontier with little difficulty and pushed on to the town of Ben Gardene, 15 miles inside Tunisia. Then the rains came! The wadi marking the frontier was suddenly transformed into a deep, swift river, and for a week the spearhead alone represented this part of the Eighth Army in Tunisia, while the remainder kicked their heels on the Tripolitanian side. Then our sappers got busy. Working day and night, they built a causeway across the flooded wadi, using materials brought from the desolate village of El Assaig, which contained many ruined buildings: the timber needed had to be brought from Tripoli, more than a hundred miles away.

The *Luftwaffe* bombed and strafed the bridge-builders incessantly. But finally, when the work had been completed, the main body of the Eighth Army began to cross. The whole fighting force was established in Tunisia during one night, and the advance was then resumed—with the original spearhead in the van—in the morning.

Throughout the period when it was quite cut off, the spearhead had been in contact with the enemy. But only a small number of their supply vehicles had reached them before the rains came down. There was not enough petrol, water, ammunition or rations to sustain them for long. Would not relief come when it did!

ONE OF THE REASONS FOR ROMMEL'S DEFEAT AROUND MEDENINE: British 6-pounders in action against the new Mark III special tanks which the Germans used in their abortive counter-thrust

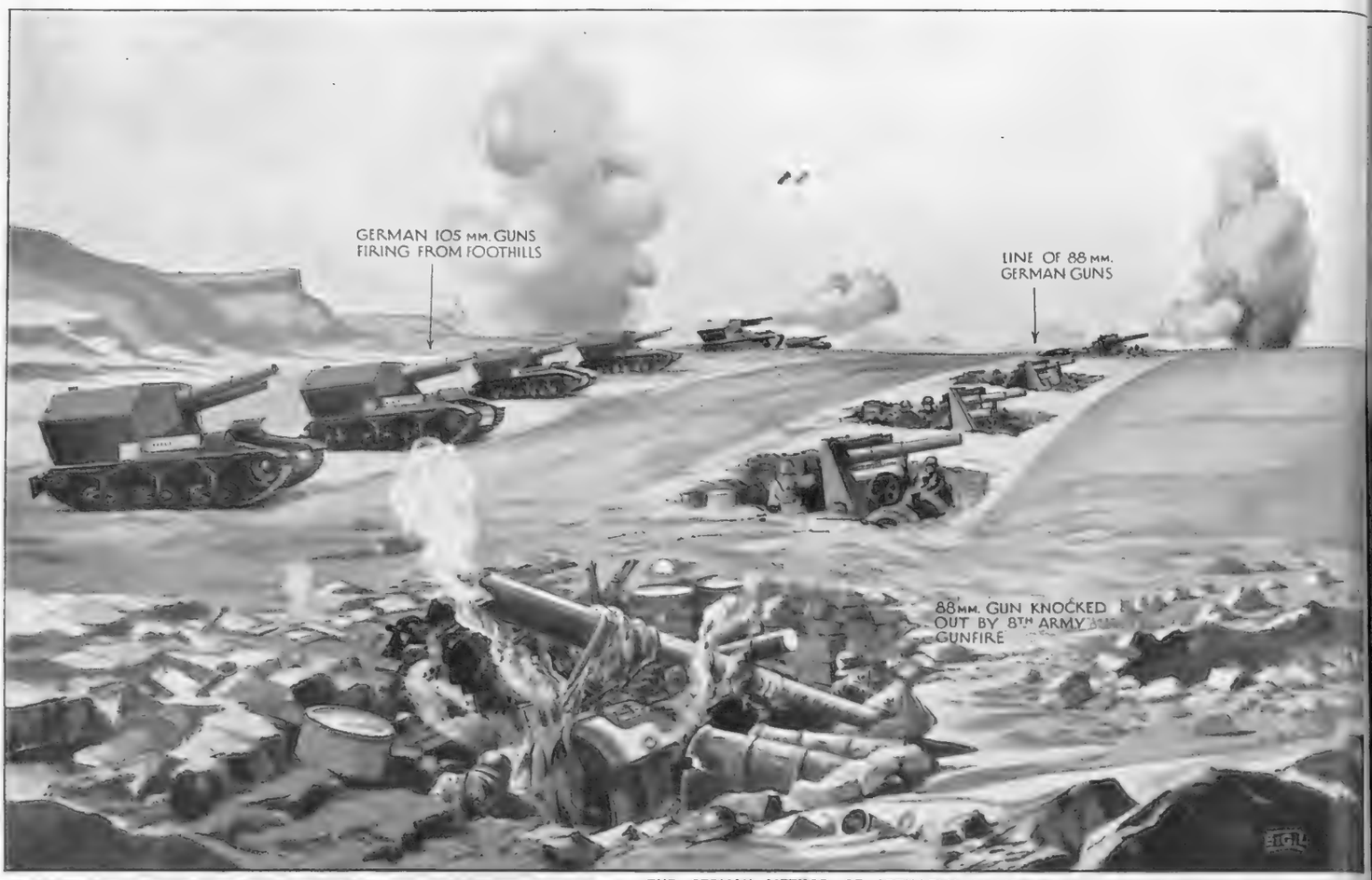
On left—AN OUTPOST OF THE FAMOUS MARETH LINE: Just outside Foum Tatahouine, one of the outposts of the Mareth Line covers several roads and passes. It is now firmly in Eighth Army hands. The outpost consists of a rocky hill in the middle of a valley in mountainous country. Trenches cut in the rock connect a number of concrete pill-boxes, and there are arrangements for sleeping and cooking. But there is no provision for the use of anything but light arms; and it does not appear as if the enemy intended to hold the position for long. The Eighth Army took it after but little enemy resistance

HOW THE GERMAN ASSAULT ON THE BRITISH POSITIONS ON THE MEDENINE RIDGE WAS REPULSED. In the distance are the Matmata Hills, flanking the British line. The German infantry were mown down as they surged forward in open formation during a stiff fight—*Drawing by E. Byatt*

When Rommel attacked the Eighth Army in front of the Mareth Line he sadly failed in his object: not only was he repulsed with very heavy losses (whilst our own did not amount to more than 200 killed and wounded), but he also caused demoralisation amongst his own men as a result of their defeat. In the main, on the Medenine Ridge, it was an infantry thrust: at first the enemy succeeded in gaining some of the high ground on the Jebel Saikra, but General Montgomery immediately flung in a counter-attack, and inside an hour the whole ridge was back again in our hands after a very bitter struggle. The attack by the Germans was described by a British brigadier as suicidal: "They advanced across flat country in open formation," he said, "and our guns gave them a terrible barrage. They broke and retired." At the end of the sortie, Rommel's counter-thrust was beaten back, his attempt to "rattle" the Eighth Army was an ignominious failure, with heavy losses in men and tanks, and his Afrika Korps was demoralised for the great trial which was to follow when the offensive by the Eighth Army was launched on March 20

THE BRITISH GUNNERS STAND UP TO AN ASSAULT BY A GERMAN PANZER FORCE ON MEDENINE RIDGE, when Rommel launched his attack. Five of the new German Mark III tanks were knocked out in the first ten minutes of battle by our anti-tank gunners stationed behind the crest of a hill—*Drawing by E. Byatt*

When the Axis attempt was made on March 5 to break through our Mareth positions, it proved to be a victory for the clear, calm courage of our anti-tank gunners, for all the enemy's attempts to smash through by sheer weight of armour were thwarted by their intrepidity. Our guns were stationed behind the crest of a hill to the west of Medenine: minefields covered the approaches, and signposts were set as a trap for any tanks which might attempt to skirt round the edge. Sure enough, five enemy tanks swallowed the bait. "As the first tank nosed its way around the escarpment, we held our fire to see whether any more were with it," said one of the gunners, "Four more followed at intervals, but as no more came into sight we opened fire. To our intense satisfaction, we scored immediate 'bulls.'" After the battle was over, our demolition parties found the knocked-out vehicles strewn about the country-side, "looking like so many kettles without their lids—they all had their turrets smashed away"—evidence of the good marksmanship of the anti-tank batteries



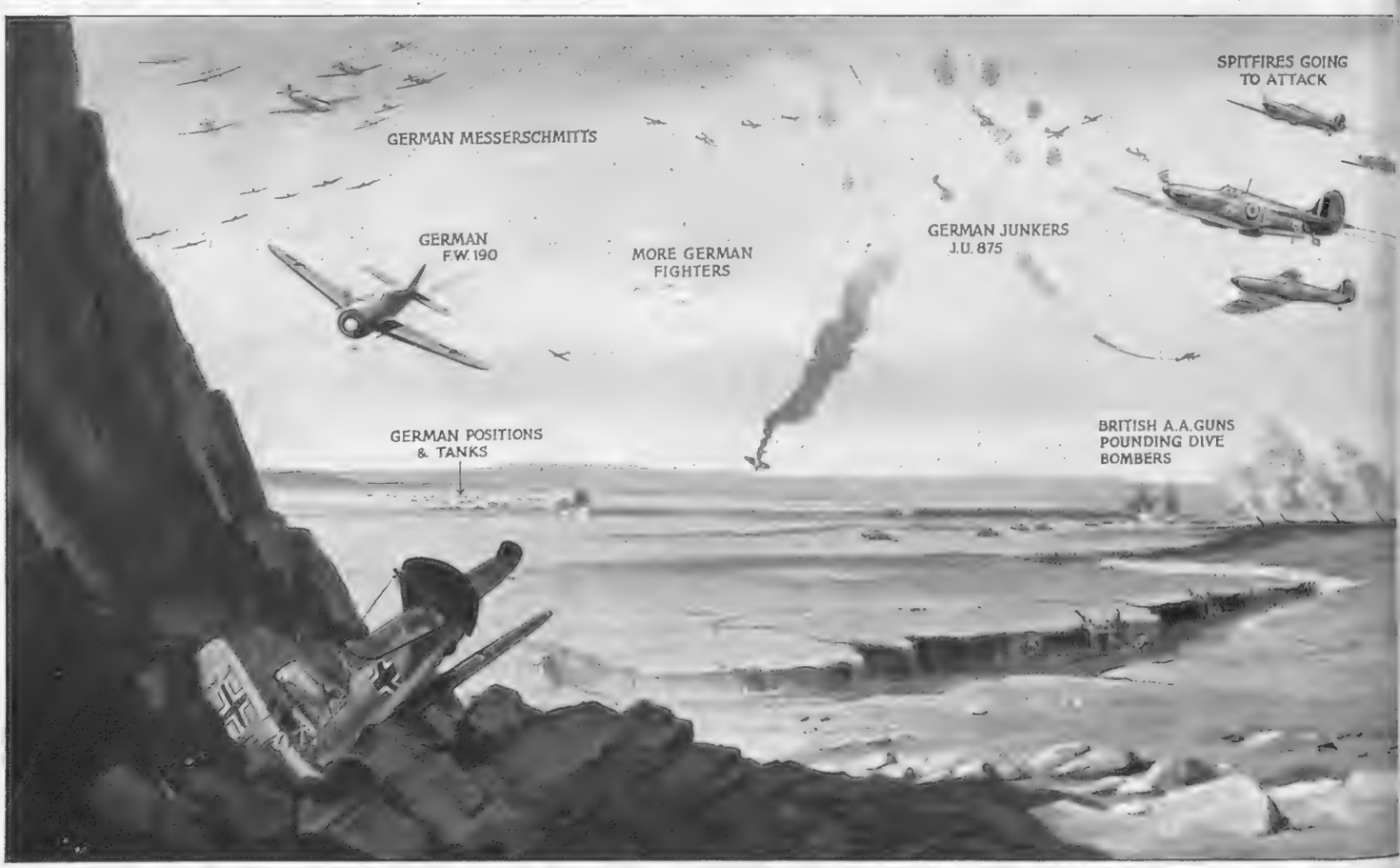
The Battle for Tunisia

GERMAN ARTILLERY and AIR TACTICS

And the Success of the British "Tank-Busters" in Front of the Mareth Line

THE GERMAN METHOD OF ARTILLERY CONCENTRATION, WHICH THE EIGHTH ARMY BRO DOWN AT MARETH: The strong line of 88-mm. guns, supported by mobile, tan mounted, 105-mm. guns, in the Mareth foothills—*Drawing by E. G. Lambert*

When hard-pressed in the Mareth-Medenine area, the German commanders employed every available weapon. Tanks were thrown in as the mobile elements in panzer attacks, and when their gunfire was opposed by the steady counter-fire of Eighth Army gunners, the Germans called up heavier and heavier weapons to reinforce the attack. Out from the protection of the big gullies and the wadis came the heavies—the 105-mm., whose mission was to blast the Eighth Army ammuni transports and other close-up supplies. One spondent says: "The Germans tried to get th powerful guns up to support their tanks and inf and the battle ultimately developed into a vast d Their gunfire had to be reduced; how effectively was done was evidenced by the subsequent d sc at Medenine of a nest of 88's completely knocked

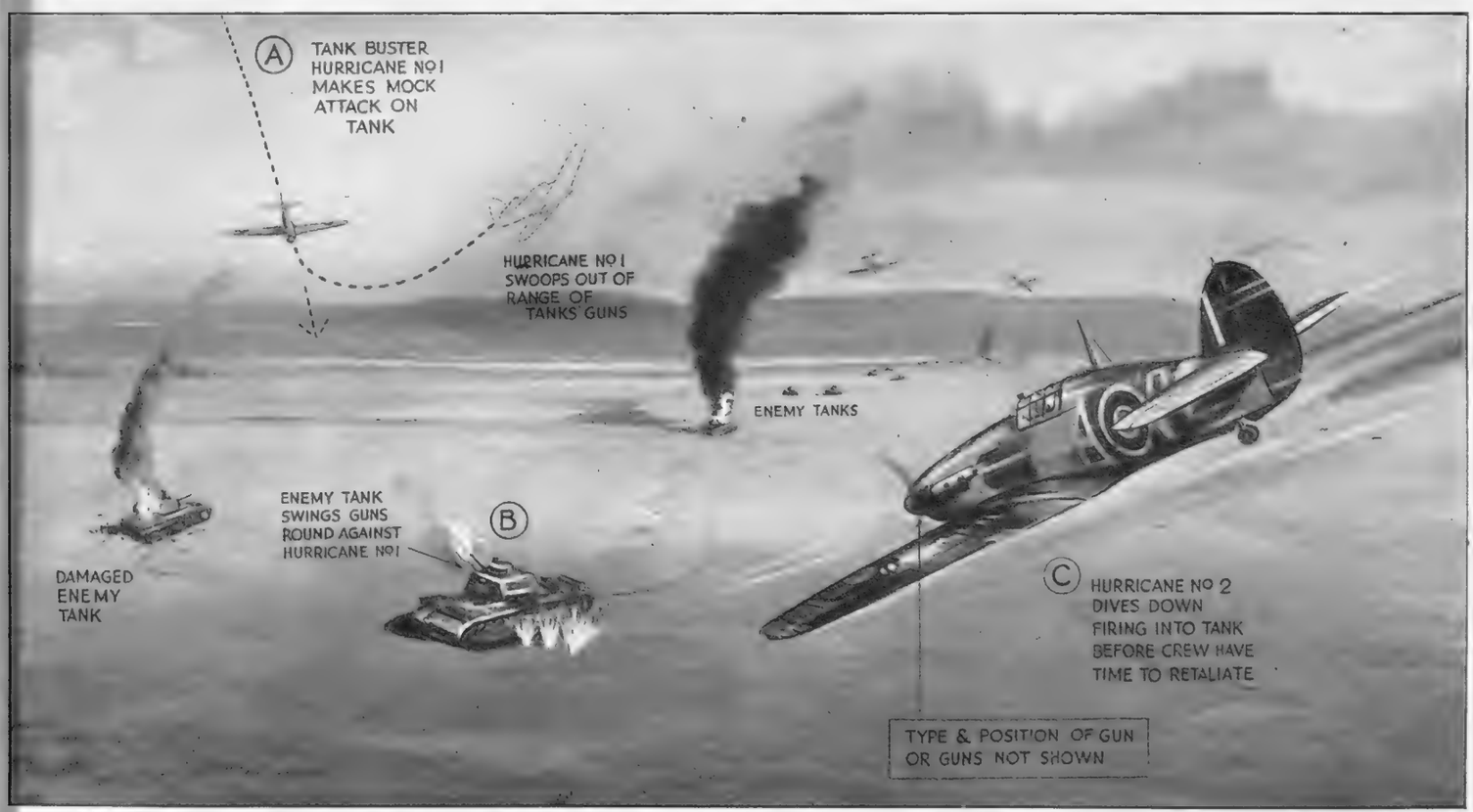


BEFORE THE OPENING OF THE OFFENSIVE ON MARCH 20, AIR ACTIVITY BY THE GERMANS REACHED A PEAK, until the R.A.F. got into their stride and swept "Luftwaffe" out of the air, so that the Eighth Army could go forward as at El Alamein—*Drawing by Roland Davies*

Feverish activity by the *Luftwaffe* was a sign of German nervousness during the days immediately preceding General Montgomery's advance. Credible observers reported that air activity over Tunisia reached its greatest peak since the battle of Egypt. Messerschmitts, Focke-Wulfs, Junkers dive-bombers and many other aircraft were to be seen: they came in recklessly, to strafe the British rear positions and to drop bombs from unusually low heights. The Stukas operated singly and in flights, and the *Luftwaffe* had even brought out their latest and best type—the F.W. 190. T R.A.F. refused to be put out of their stride, however; day after day, they went after the enem until, when the Big Day arrived, they swept the *Luftwaffe* out of the skies. For twenty-four ho each day they bombed, fought, machine-gunned, giving the ground forces that co-operation wh led to such certain victory at El Alamein

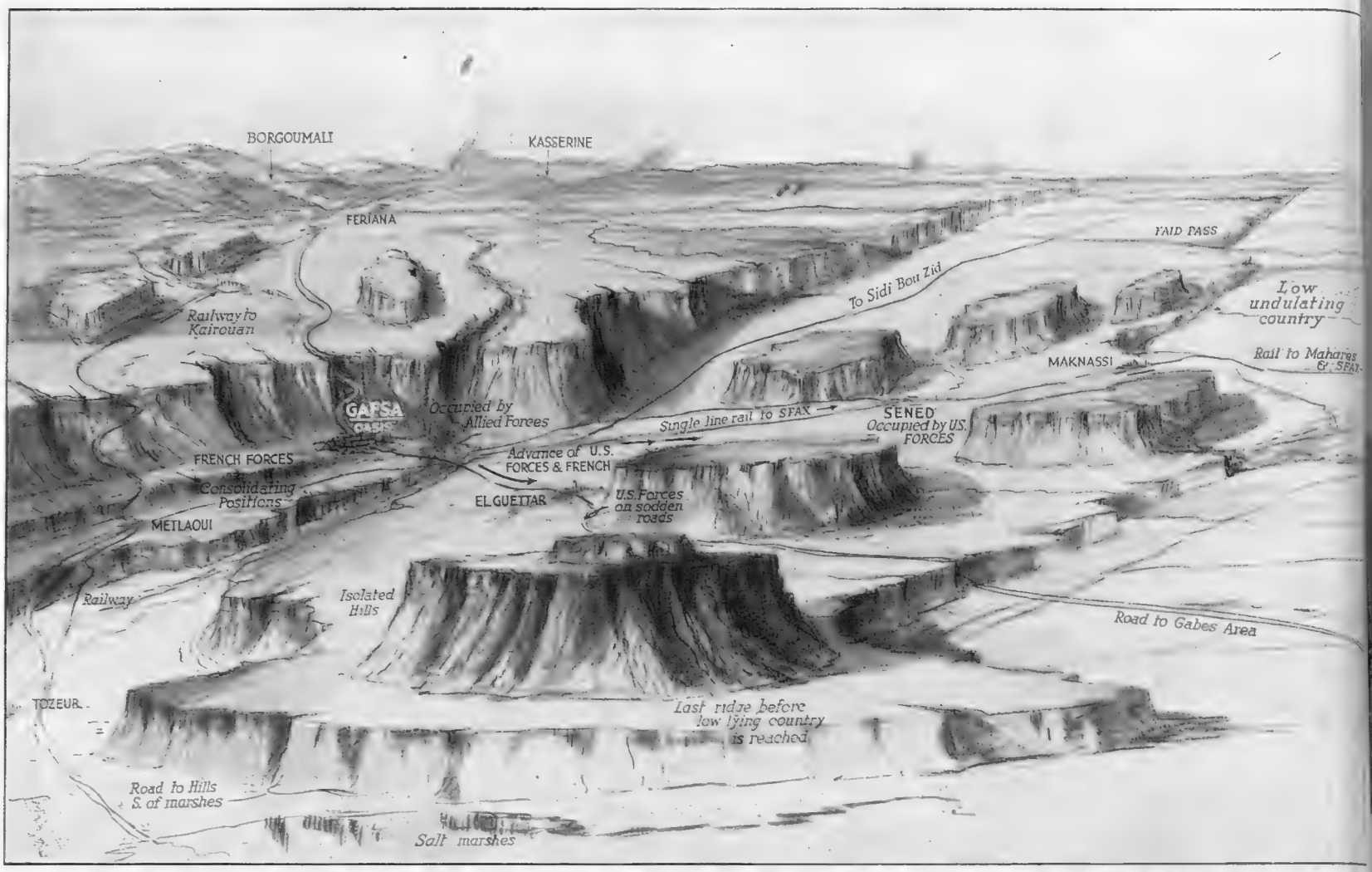
AN AIR SWITCH BY THE AXIS DURING THE MARETH FIGHTING: Fighter-bombers are called upon to take the place of Stuka dive-bombers during Rommel's attempt to repel the Eighth Army—*Drawing by W. G. Whitaker*

During his counter-thrust at the Eighth Army, and before the big offensive launched by the latter, Rommel had evidently ordered a change in tactics. For air support during his attacks around Medenine and in the Matmata Hills, he relied chiefly on fighter-bombers: the *Luftwaffe* had apparently taken a leaf out of our book and abandoned the Stuka—at least temporarily. In their raids on our lines, large formations would come over and loose their bombs. Then, when returning to their own lines, they would swoop low, spitting bursts of machine-gun fire: on such occasions they would fly low enough for our observers to identify them as new Me.s. But the country in this region is rich in covered approaches and offers great advantages to troops trained in the use of ground cover. Transports would halt in wooded ravines and reply wth machine-guns to good effect, whilst the infantry would take cover in caves in the wadis



ONE OF THE BRITISH REPLIES TO THE TANK IN TUNISIA: Tank-busting Hurricanes at work in threes. A triple attack such as this nonplusses the tank; it cannot turn its turret quick enough to meet the second and third assaults as the "tank-busters" come hurtling in from different directions—*Drawing by Roland Davies*

"Tank-busters"—Hurricane fighters fitted with special heavy-calibre guns—were mentioned by the Air Minister in the House of Commons a few days ago as operating with the Eighth Army for the past nine months. The activities of this special branch of the Desert Air Force had been forbidden to correspondents until Sir Archibald Sinclair's announcement was made. But it is known that great successes have been scored against the enemy's armour by these specialised aircraft, which first went into action in Cyrenaica last June. During the next month one squadron alone accounted for seventy-four tanks, forty-six lorries, eight armoured cars, four six-wheeled troop-carriers and three bowsers—all for the loss of one pilot! The above drawing shows one of the tactics successfully pursued by the "tank-busters." By working in threes and coming in from different directions, the tank under attack cannot follow the movements of all three with its turret: it is thus apt to fall a prey to the "tank-busters" when unsupported by other fighting vehicles



WHERE THE U.S. FORCES, UNDER THE COMMAND OF MAJOR-GENERAL PATTON, MADE THEIR ADVANCE TOWARDS THE COAST by way of Gafsa, Sened and Maknassi. This area is just north of the Salt Marsh district which makes a bottleneck near Gabes. Combined bodies of U.S. and French troops began to press to the eastwards here, whilst the Eighth Army was battering at the Mareth Line and then beginning to surge northwards (*See* notes below)—*Drawing by Percy Hor*

The Battle for Tunisia

The MARETH LINE and the GAFSA AREA

Where the Joint British and American Offensives were Launched Against the Axis

The drawing of the Gafsa area reproduced above shows the nature of the terrain in Southern Tunisia which confronted the mixed U.S. and French forces in their eastward drive towards Gabes, and which formed the western flank of the Axis forces.

The hill country stretches out into a number of fingers down on to the lower, slightly undulating, coastal plain which stretches from Gabes to Tunis. This broken region is the last and easternmost portion of the great Atlas Range. From the heights of Tebessa the ground falls away in a series of terraces cut by passes, some of which have now become world-familiar names owing to the recent fighting in which the German forces attempted to clear this area of Allied troops.

Since then, however, combined U.S. and French units under the command of Major-General Patton (who has taken over from Major-General Fredendall as Commander of the American Forces in North Africa) have made advances eastward through Gafsa, a pleasant little oasis tactically valuable as the meeting-place of several roads. One of the latter leads eastwards through Sened to Maknassi, and so on to the coastal plain; another—a fairly good one—leads through broken country by way of El Guettar to Gabes: there is some steep hill cover in places on this route. There is also a connection with Tozeur, from which area the French column under General Leclerc had been working in a south-easterly direction.

The chain of salt marshes lying to the south of the hilly district run from east to west and are flanked by hills which have proved of military value to both sides (these are better seen in the drawing at the bottom of the opposite page). As the Americans moved towards the east, they left behind them the arid, treeless plateaux and emerged into the more fertile coastal plain, where palms and vast tracts of olive plantations afforded a novel type of cover.

General Patton's advance was planned to coincide with the northwards push by General Montgomery's Eighth Army: whatever advantages Rommel may have secured during his February attack in the Gafsa area have now been more than wiped out!

THE NATURE OF THE COUNTRY IN THE GAFSA AREA, where the hills and gullies allow of surprise tactics by the tanks. The vehicles seen in this picture are Crusaders mounted with 6-pounder guns: they present a formidable combination of speed, armour and fire-power; and they have played a dynamic role in the recent fighting

THE AMERICANS ATTACK AT SENED: With the smoke from two German aircraft shot down by the Americans rising from the battlefield, a U.S. tank attack is stopped by Axis bombers. During the first battle for Sened early in February, the Americans captured this Tunisian village, but later they withdrew: it was again occupied by them on March 20, when they marched in without having come into contact with the enemy

A NEW IDEA IN ARTILLERY WARFARE IN TUNISIA. A formidable 25-pounder gun mounted on a Valentine chassis, as used by gunners of the First Army. This is one of the latest developments from North Africa, where weight and fire-power are becoming prime considerations on both sides

The Mareth Area *(See drawing below)*

The country in which the Eighth Army launched its heavy attack on Rommel's Afrika Korps on March 20 is curiously diversified: a flat map, in fact, gives but little idea of the local problems of terrain which are presented to the individual commanders.

Right, centre and left differ materially. On General Montgomery's extreme right is the sea, up to which stretches an area of marsh and sand: moving towards the centre comes an undulating stretch through which runs the main road to Gabes by way of the village of Mareth, on which Rommel's left was pivoted.

This country is cut at intervals by wadis: these natural "bunkers" stretch back through the foothills of the Matmata heights to the steep passes which were used by the enemy as hiding ground. A forward ridge in this area was held by the Eighth Army at the moment when the great offensive opened. From it, looking southward, rises a sheer-sided hill-massif like a solid wall, "forbidding enough to make the boldest general pause and puzzle," as one correspondent wrote on viewing the scene.

Around the bases of this fortress, with walls 2,000 ft. high, are a number of lesser foothills. The high ground is seamed with great gullies 600 ft. deep in which the guns boomed and reverberated. The road from Medenine to Tozeur, away in the Salt Marsh district, runs across this high ground through the Hallouf Gap

Enemy tanks and guns were placed in all the natural cover which such a country afforded. There was brief fighting at one time on the Medenine-Foum Tatahouine road, which later spread to the hill villages: but the enemy was evicted from these very quickly. Fighting then stretched out to the extreme left—at Kasr Rhilane, some 55 miles to the south-west of Medenine, down on the lower ground from which one sees the roads and tracks extending to Tozeur and the Gafsa region.

When the great offensive by the Eighth Army opened, it was on the extreme right of the British line, on a six-mile front, that General Montgomery chose to attack

THE BATTLE AREA AROUND THE MARETH LINE, where the Eighth Army withstood Rommel's attack in the early days of March and where they then began to break through on March 20. This drawing shows the position of the Mareth Line and of Mareth village; the coastal strip along which the British advance was made on a six-mile front; and the high ground on the British left flank which has controlled the tactics of both sides. The view is taken from a point above the higher hills behind Foum Tatahouine, seen in the lower corner. This was originally a French bastion of the Mareth fortifications which ran through the hills from Mareth village to this point. It was occupied by the Eighth Army a short time prior to the big assault on March 20. Enemy gun positions were "mopped-up" in this central hill region from time to time, so that the fighting line became a very sinuous one, with gullies, hill villages and ancient forts intervening (see notes above)—*Drawing by Percy Home*

The Battle for Tunisia

THE AMERICAN SOLDIER IN TUNISIA

Details of His Equipment, as Recently Observed by ERVING GRIFFITHS

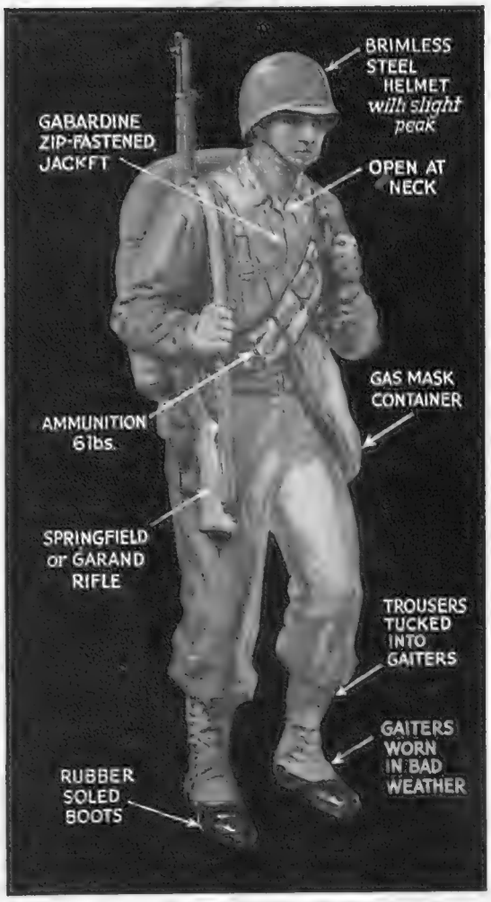
A CRISP success-recipe handed down by a Civil War General still inspires the U.S. Army—"Get there firstest with the mostest." To get there first, lavish use is made of "Peeps," "Jeeps," trucks and half-tracked vehicles of every kind as troop-carriers. They ensure having "mostest," not in mere numbers perhaps, but certainly in fire-power, by using more automatic weapons in their infantry than does any other army—the Germans not excepted.

Thus among American troops in battle a wide diversity of weapons and personal gear will be noted. Common practically to all of them, though, is the gabardine zip-fastened jacket, replacing the blouse of our battledress. In appearance, it resembles a golfer's jacket, with buttons as well as a zip-fastener. The trousers are normally caught up by gaiters reaching just above the calf, but these are often dispensed with if the weather permits. Boots up to now have been rubber-soled, though this may not be possible much longer.

The battle-pack of the U.S. infantryman has now been cut to around 48 lb in weight. Among the more conspicuous items are a shelter half, or "pup tent," as it is called, stake, rope and pole, carried on the back and weighing about 3 lb. Two men can thus make a tolerable joint "bivouac." On top of this may be a folded slicker, or waterproof, and also a blanket. On the right hip is usually a canteen (water-bottle) and mug, balanced on the left side by mess and first-aid kit.

Ammunition, weighing about 6 lb. and totalling sixty rounds of ·30-calibre in the case of a rifleman, is usually slung in pouches on the chest. Emergency rations of varying and elaborate make-up—some including self-heating tin foods—are also included in the pack.

THE BATTLE UNIFORM AND EQUIPMENT OF A U.S. RANGER, or "Commando" soldier. His boots are laced high above the ankles, and various straps around his belt provide for the Ranger's specialised kit—*Drawing by W. G. Whitaker*



FRONT AND BACK VIEWS OF THE U.S. INFANTRYMAN'S KIT: Two drawings which show how the various items of his equipment are carried, and the type of uniform he wears in action. He carries a semi-automatic rifle, and his battle-pack alone weighs 48 lb.—*Drawing by W. G. Whitaker*

It is in the weapons, however, that the greatest variety is noticeable. The ordinary rifle—the Springfield ·30 calibre—is regarded as being obsolescent. It has already been largely replaced by the Garand or M.I. semi-auto of the same calibre. Even this is due to be partly superseded by the latest Winchester fully-automatic carbine, which is 7½ ins. shorter and about 4½ lb. lighter than the Garand.

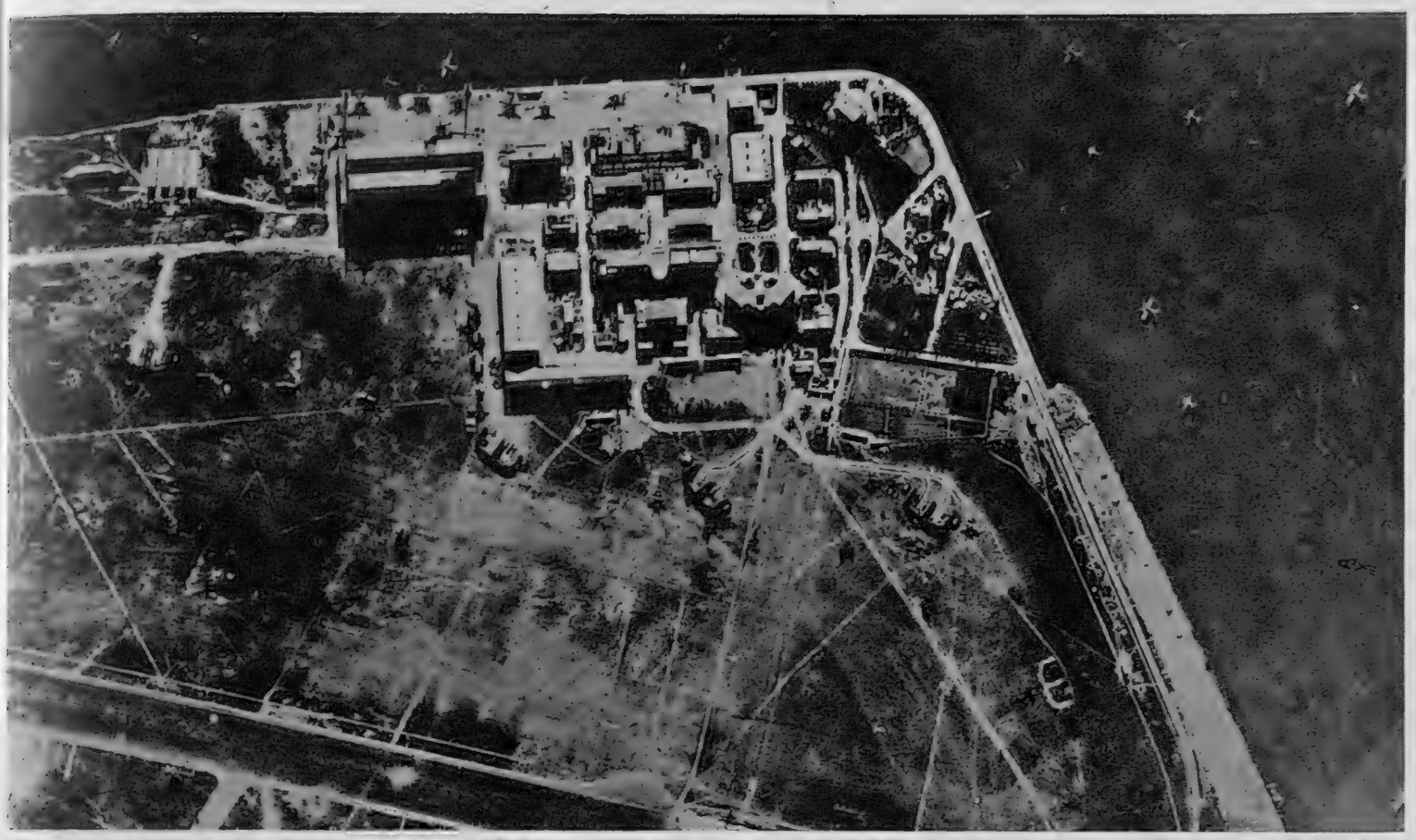
An American infantry or rifle regiment is composed of three battalions, each of three companies, each of three platoons, each of three squads—to so-called "triangular" make-up. Each squad being of twelve men, the rifle regiment should muster about 1,000 men. A very considerable proportion of these have, up to now, been armed with a Colt ·45 automatic pistol, but many of these are also to have their pistol replaced by the new Winchester. Up to date, each rifle company has had three Garand rifle squads, but, as has been stated, this proportion is to be increased, though it is not yet known how far this has already been done in any theatre of war. The company also has heavy and light machine-guns and 60-mm. mortars. A heavy-weapon company is included in each battalion: these supplement the weapons already mentioned with an 81-mm. mortar and anti-tank guns. The artillery of each division, which on the triangular system would muster about 14,000 men, includes the 105-mm. howitzer, which has been mounted on the Grant tank chassis and is proving so valuable in the African campaign.

Common to all branches of the Services are the pudding-basin shaped, brimless steel helmets, stated to be a blend of the German and Italian styles, and the gas-mask, in a bulky haversack, with its round-bottomed canister and conspicuously long breathing-tube. Like our own, the U.S. cavalry has been completely mechanised. Many of them have been given tanks; others have been turned into motor-cycle scouting troops.

Thus among the weapons which may be seen with American infantrymen in the field are the Springfield ·30-calibre rifle, the Winchester and Garand automatic rifles, the Colt ·45 auto pistol, ·30-calibre light and ·50-calibre heavy machine-guns, 60-mm. and 81-mm. mortars and various anti-tank weapons, besides the traditional side-arms of bayonet and grenade.

TWO U.S. RANGERS, with their battle equipment, at a British Commando depot for training. These men are trained as hard-hitting assault troops

AN AMERICAN INFANTRYMAN IN ACTION DURING TRAINING. Note the typical U.S. gas-mask, which appears to be somewhat bigger and less compact than the British type



THIS PICTURE WAS TAKEN BY A RECONNAISSANCE PLANE OF THE 12TH U.S. AIR FORCE during a flight over the great Italian air base at Cagliari, in Sardinia. Note the lay-out of the aerodrome and airport buildings, and the seaplanes lying at anchor off-shore

DAYLIGHT RAID ON SARDINIA

What a Reconnaissance Flight Revealed; and the Bombing Results that Followed

Cagliari is an important aerodrome and seaplane base on the island of Sardinia in the Mediterranean. Some little time ago, a reconnaissance plane of the 12th United States Air Force in North Africa flew low over the aerodrome and brought back the fine close-up picture reproduced above. This showed, in every detail, the aerodrome installations and buildings: it also revealed a number of aircraft on the ground, and scores of seaplanes anchored in the water off-shore. Later, a large force of Flying Fortresses and Marauders, escorted by Lightning fighters, flew from their base in Tunisia to carry out a daring daylight raid: a heavy load of bombs was dropped, and the airport, seaplane base, installations on the ground and many aircraft were wrecked. When the bombers departed, much of the base and airport was in smoking ruins. The picture below shows the beginning of the attack, with two strings of bombs laid perfectly, right across the ground and out into the sea. Later, the other bombers completed the work of destruction, causing great fires and much damage. Neither bombers nor escort suffered the loss of a single aircraft.

THIS IS WHAT FOLLOWED AS A RESULT OF THE RECONNAISSANCE. Two perfect strings of bombs explode on the aerodrome and adjoining seaplane base on the island of Sardinia, at the opening of the attack. More aircraft followed, and the important base was ultimately laid waste by Flying Fortresses and Marauders from Tunisia without the loss of a single American aircraft

THE DIFFICULTIES OF ADDING BOMB-PROTECTION ARMOUR TO VESSELS OF THE HEAVIER TYPE. The very great weight involved in such additional protection would mean either increased engine-power or considerable loss of speed—*Drawing by Wm. McDowell*

This diagram may be taken as an indication of the modern tendencies in naval architecture to design warships with a view to protection against bombing from aircraft. This is no easy matter, for to armour the whole deck of any type of warship, from a cruiser upwards, with armour of sufficient thickness to form an adequate protection against heavy bombs entails an enormous extra weight. This, in turn, means either extra engine-power (which is not easy to achieve, especially in time of war) or a sacrifice in speed (which would frustrate the whole *raison d'être* of the cruiser). In addition to the deck being armoured, the turrets and ranging towers require the same protection; as these are usually placed in high positions, the weight of their armour so far above the waterline might tend to impair the vessel's stability, especially at speed in a heavy sea. This drawing shows how a vessel, such as the U.S. battleship *North Carolina* (one of the most recent to be launched across the Atlantic), is protected: here is a key to the points marked in the drawing—**A** The main armour belt; **B** The secondary armour belt (both these are for protection against shell-fire); **C** Armoured deck (for protection against bombs); **D** Turrets heavily armoured; **E** Ranging and control positions armoured; **F** Armour casing to engine and boiler spaces; **G** Armour gratings in all uptakes; **H** Longitudinal bulkheads to form protection against torpedoes; **J** Engine and boiler spaces; **K** Double bottom

The BOMBER THREAT to WARSHIPS

With Special Reference to the Battleship and Cruiser

Notes by PATRICK HAMILTON

Special Sphere Drawings and Diagrams

THE bomber *v.* battleship discussion rather resembles a law-case; for every favourable decision put forward by one counsel, the opposition are able to cite another to the contrary, and the final verdict is obviously going to be long delayed, if it ever arrives at all. The pro-bombers naturally point to the loss of the *Prince of Wales* and *Repulse*; the "antis" to the *Scharnhorst* and *Gneisenau*. Dozens of instances can be produced pro and con. Without attempting to take sides, it is still interesting to see how the advent of the bomber has affected surface warships.

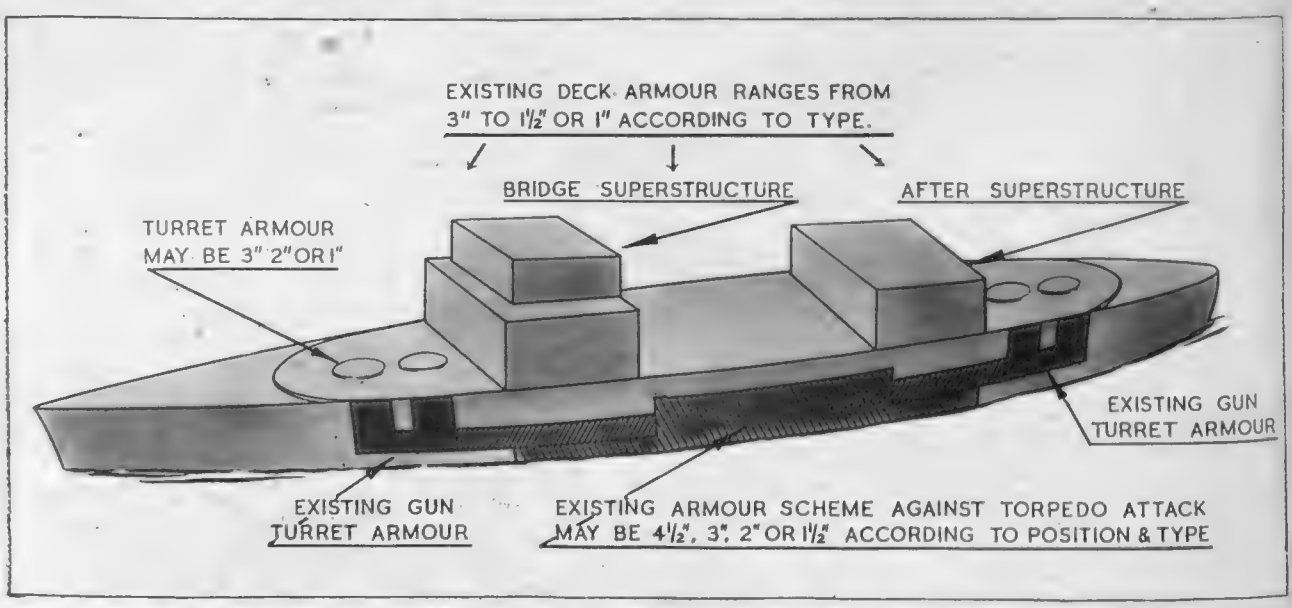
Good, useful vessels of the pre-bomber days are the Kent class cruisers. Their deck armour, when they were built under the 1924-5 estimates, was nowhere more than 3 ins. thick, often only 1½ ins., and even this was confined to the more vital spots. Over large areas there was no deck armour at all.

Of course, all this class were reconstructed shortly before the war, when steps were taken to improve their deck protection. But contrast their original armour with that which Colonel Knox says is now being given the U.S. Navy's latest cruisers: it is 5 ins. thick. Rumour credits the latest U.S. battleships with anti-bomb deck armour 10 ins. thick, which is as much as some of our older 1918 battleships had as their main protection.

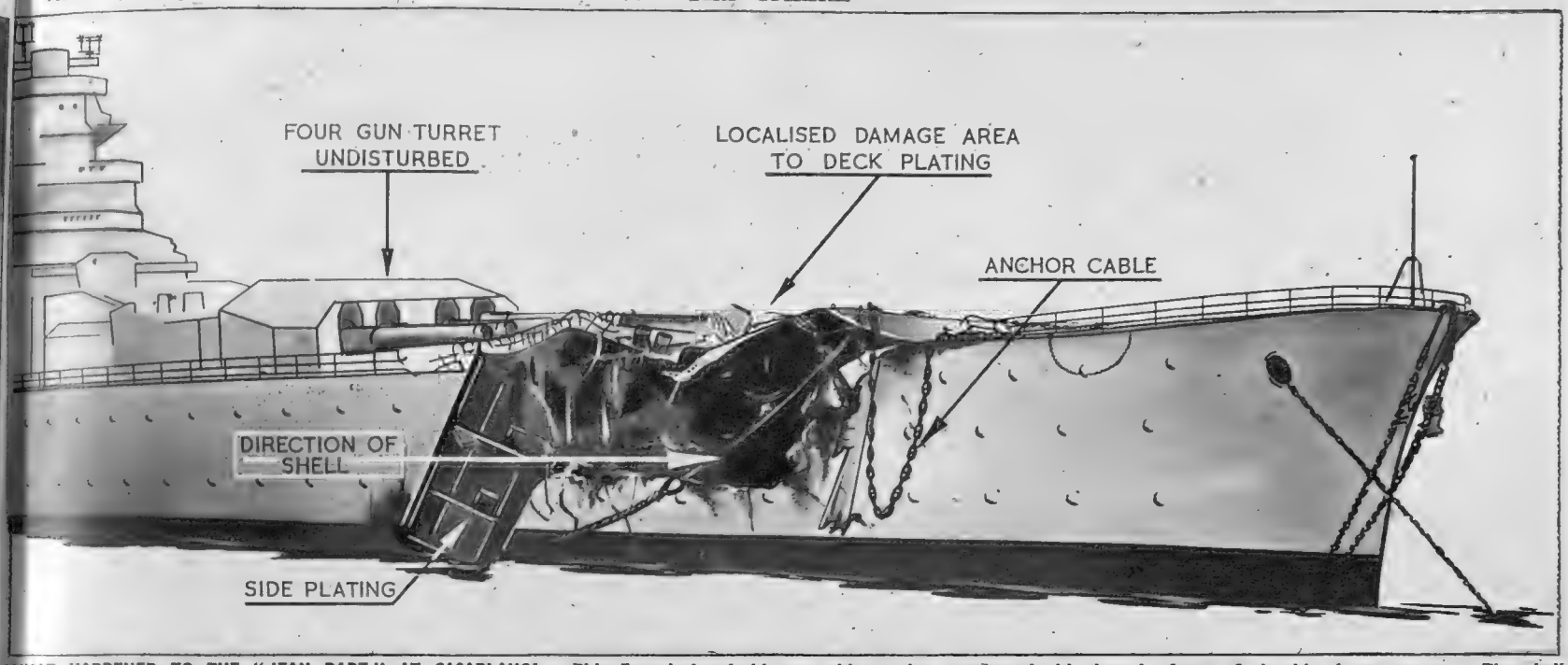
The mere admission of the necessity of mounting such heavy deck armour would probably be claimed by the bomber adherents as a moral victory. Such extra weight costs money, it takes more fuel and bigger engines to propel, and though it is needed as an extra protection and gratefully accepted as such, it is an extra burden on the already complicated job of the warship designer. One may take it for granted that for many war vessels it is absolutely impossible to give them such thick deck armour that the bombs will not penetrate if they hit. Take an aircraft-carrier, for instance. Its flight deck may be over 70 ft. above the waterline. It is obviously impossible to consider plating a couple of acres of flight deck with heavy armour steel, for such a huge load at so great a height would render the whole ship unstable.

For the ordinary class of vessel, then, it becomes a question of designing her to stand a certain amount of punishment by bombs, and then to develop A.-A. guns and other devices to the point at which it will require extreme and almost uneconomic efforts by the enemy to inflict a greater degree of punishment. Naval A.-A. gunnery is very effective indeed. One remembers the sacrifices made by our own airmen when the *Scharnhorst* and *Gneisenau* were steaming up-Channel. In the Midway Island battle, the American airmen several times lost five planes out of six, in one case fifteen out of fifteen planes, sent out to attack Japanese warships. In the same way, our own Mediterranean and Murmansk convoys have always taken very heavy toll indeed of the enemy raiders.

So we come up against the tactical stalemate which is so common in war, when each side is able to inflict heavy, but not decisive, punishment on the

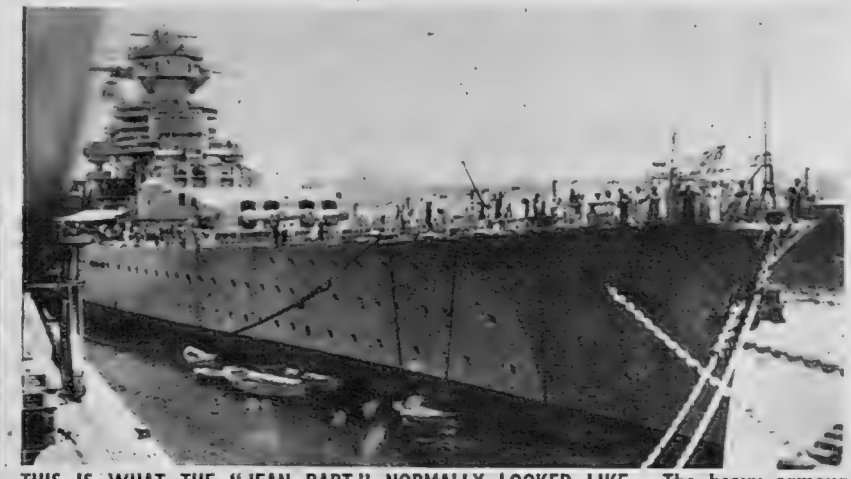


HOW A CRUISER IS PROTECTED BY ARMOUR: On the deck the belt would range from 3 ins. down to 1 in., according to the type of vessel; the armour belt on the sides, for protection against torpedoes, would range from 4½ ins. down to 1½ ins.; the gun turrets would be armoured, and so would the bridge and aft superstructures. Too much armour would slow down the cruiser and defeat the primary functions of this type of warship—*Drawing by B. C. Wood*



WHAT HAPPENED TO THE "JEAN BART" AT CASABLANCA: This French battleship was hit on her starboard side just in front of the big 4-gun turret. The shell struck home just forward of her heavy armour belt and went clean through from side to side. The plates were comparatively thin and the deck above suffered considerable local damage. The heavy turret itself was undisturbed—*Drawing by B. C. Wood*

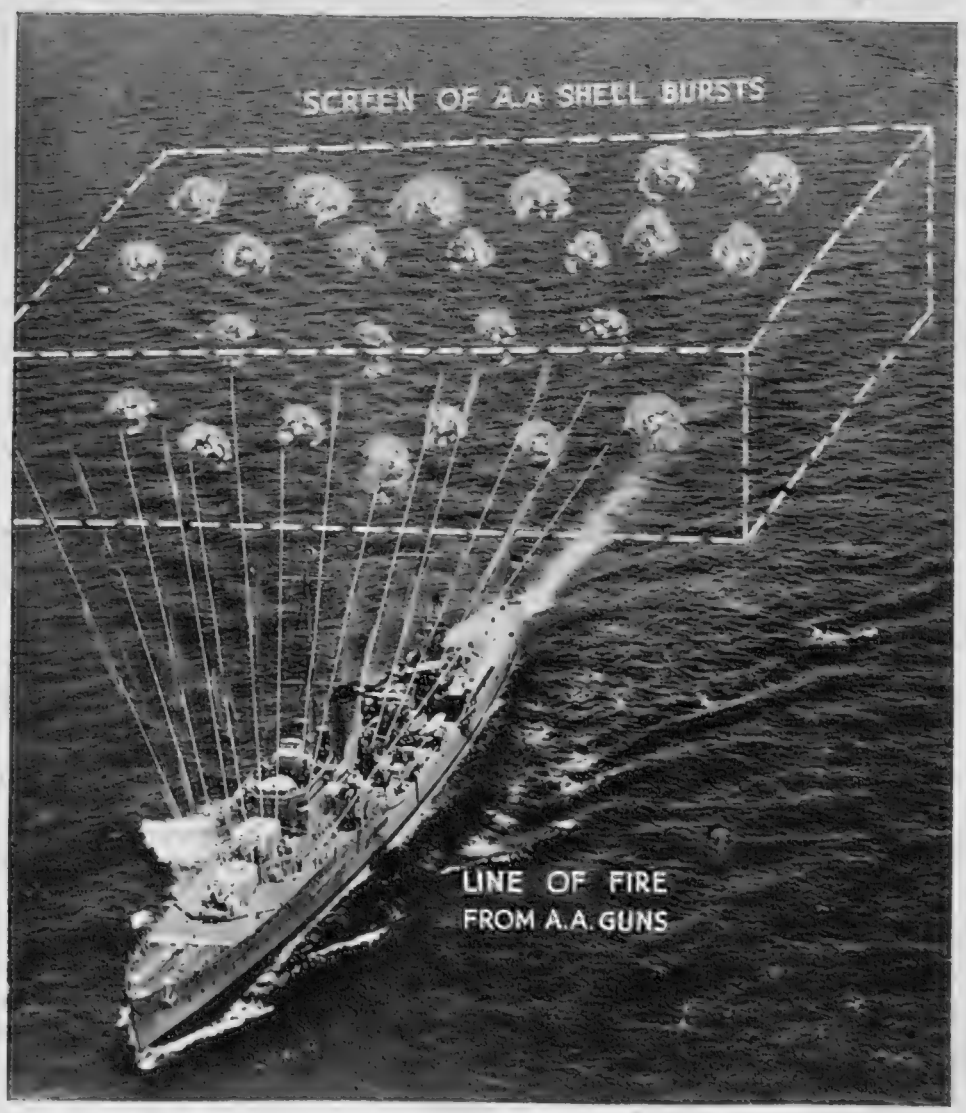
THIS IS HOW THE "JEAN BART" EMERGED AFTER THE ATTACK AT CASABLANCA. Although her starboard side appeared to be in a mess, the battleship did not suffer vital damage



THIS IS WHAT THE "JEAN BART" NORMALLY LOOKED LIKE. The heavy armour belt on this vessel runs right from the aft turret to just below the forward turret. The shell struck in a comparatively unarmoured spot

other. The deadlock, as a rule, is broken only when the chances of war happen to tilt the scales in favour of one adversary or the other. Thus during the evacuation of Crete, when we suffered very heavy naval losses, the air strength was completely one-sided. On the other hand, in the brilliant action fought by MacArthur's bombers on March 6, the Allies had the shore bases and sunk twenty-two ships with 226 tons of bombs. Here the Japanese planes were mainly carrier-borne machines of inferior performance to ours. The middle and more common case, in which each side takes heavy punishment without being able to administer a knock-out, is given by the Mediterranean. Here each side has certain advantages; neither side as yet is superior over the whole area, and so neither is able to completely deny the passage of the seas to the other.

Granted the necessary weight of numbers, there is no doubt that the bomber can deal very heavy punishment. Vessels do not carry an unlimited number of men to man their A.-A. guns. Casualties are heavy in long attacks; the point is sometimes reached where a large part of the gun crews have been killed or wounded by bomb splinters. If the air force then still has the strength to continue the attack, it may have matters all its own way. It is not necessary to hit a light warship to sink her. Destroyers are frequently disabled by near misses which cause buckled plates and uncontrollable flooding. But the numbers of planes which will be required to maintain such attacks on every ocean front until a decision is reached will be fantastically high. Fortunately for us, the Allied nations are in a better position to attain that fantastic total than the Axis.



On right—**ONE OF THE CRUISER'S THREE ANSWERS TO BOMBING AIRCRAFT:** The modern cruiser has a great turn of speed which, in the newer vessels of the Royal Navy, might be as much as 32 knots, or even more. It is also exceedingly manœuvrable when under attack, and can throw out a smoke-screen at very short notice to hide it from exact observation above. Its anti-aircraft armament, as indicated in this diagram-drawing, is formidable: the dive-bomber attempting to swoop down to within striking distance would meet with a concentrated barrage to daunt any but the stoutest heart. Heavy A.-A. guns would be reinforced by other and smaller weapons; and, in the most recent British cruisers, the high angle to which the turret guns can be elevated would be an added hazard for the enemy dive-bomber pilot

The BLACK BERET—

The Second of Two Articles Dealing with the Work of the Royal Armoured Corps. By CHARLES GRAVES

AT the outbreak of war the Air Ministry was anxious to persuade boys of the right type to join the Royal Air Force as potential air crew, instead of waiting until they were twenty to join the Army. In this, the Air Ministry was very successful for various reasons, among them the formation of A.T.C. Wings at many of the schools.

To-day the Royal Armoured Corps is anxious to secure the same type of boy as potential tank crews. So a new scheme has been inaugurated whereby boys at any time after their seventeenth birthday up to the term in which their eighteenth birthday occurs, can enlist at the local Recruiting Office as volunteers, opting for the Royal Armoured Corps. A boy must, of course, have the permission of his father, headmaster or local guardian. But by adopting this procedure he can be assured of going into the Royal Armoured Corps (providing he passes his medical examination, and all other things being equal), instead of having only a partial chance of being drafted to the Royal Armoured Corps from the General Service Corps, to which he goes in any case, in the first instance. For normally, at the Primary Training Centre, the laws of supply and demand are bound to work, and if there is a shortage in the infantry, sappers, R.E.M.E., R.A.S.C. or some other branch of the Army, that is where the recruit is sent willynilly if his qualifications suit.

Many boys, however, whose fathers served in the cavalry, yeomanry or Royal Tank Corps in the last war, have a natural wish to enter the "family" regiment, and though there is no question of strings being pulled to secure him a commission, he has a better chance of gratifying his wish if he adopts the procedure I have described. In which event, he will go to the Training Wing of the 58th (Young Soldiers) Regiment. The syllabus here is exactly the same as at the ordinary Primary Training Centre and lasts for six weeks.

With the knowledge that the demand on fitness, both physical and mental, is at least as great as for the Royal Air Force, the authorities have paid great attention to physical training of all kinds, rope-climbing, vaulting, log-shifting and cross-country running. And many a Tank soldier in the Middle East who has had to jump out of a blazing tank under fire and fight dismounted or fetch another one, has blessed the toughness of the Assault Courses which he had to negotiate back home. Foot drill, musketry, pistol drill, knowledge of the Bren, the Boyes and the Tommy, alternate with map-reading, gas instruction, tank and aircraft recognition, Security, armoured formations, field-craft and camouflage.

The day begins at 6 a.m. with "Wakey, wakey, rise and shine." Breakfast is at 6.45 a.m. By 7.40 a.m. everyone is on parade. There follow nine three-quarter-hour periods, with five-minute breaks, apart from a slightly longer break at 10 a.m., and an hour for the midday meal. The men are trained in troops of forty. After five weeks comes the Colonel's Parade—for passing-out purposes.

All the boys who pass out successfully from the Primary Training Wing, and all the others who are selected for the Royal Armoured Corps at the Primary Training Centres, then proceed to their next evolution from chrysalis to military butterfly. In addition to the 58th Training Regiment, there are several other training regiments for those men who have been selected for the Royal Armoured Corps. Both at the 58th Training Regiment and the others, the boys and men are taught advanced general military training, elementary driving (wheeled vehicles only) and preliminary wireless. More important still, they at last see a tank.

There are three technical wings at these Training Regiments. One concerns itself with gunnery, the second with the engines and the third with the radio. The recruit who has been chosen as a gunner operator spends the whole of his first seven weeks on gunnery, apart from daily refreshers of physical training and drill. The classes vary from six to twelve under an N.C.O., who instructs them in the Bren, the Browning, both types of Besa, the 2-pdr., the 6-pdr., the 3-in. mortar and the various grenades, as well, of course, as the various stoppages.

Now comes gun drill, and the recruits move over to the crew control room, where they are placed in a revolving cage, practising aiming and firing. Near by is the pellet range, where they practise actual shooting with an air gun fixed above the 6-pdr. In the turret cage, the mechanism produces a staggering movement as well as revolving, and gives a very fair imitation of the conditions under which firing takes place in the field. Instruction on care, control and maintenance of guns, telescopes, traverse mechanism and turrets comes next.

In the meantime, the recruits selected as wireless operators spend seven weeks on learning Morse up to a rate of twelve words a minute, the Security code, lamp-signalling and flag-signalling; while the recruits selected to be drivers find themselves at the driving and maintenance wing, and receive synthetic instruction in the model driving-seat, with a dashboard full of lamps which flash as soon as the pupil makes a mistake. After this course of wheeled driving, the recruit graduates to tracked vehicles. It is now that the good horseman with an eye for country and a sense of his mount finds that his knowledge and experience stand him in good stead. For driving a tank across country is much more like horseback riding than motoring. For there is no steering-wheel in a tank. Instead, the driver pulls levers like reins to alter direction, and to cross a well he has to rev. up his tank as if he were spurring his horse; then take his foot off the accelerator at the top of the obstruction. The maintenance side of this course is stiff. There are seven thousand parts of a tank, although, of course, the recruit does not need to take all of them apart.

This period of training lasts for five months, and while it is desirable for each man to be as good at driving as at gunnery and radio, it is usually the case that he specialises in two out of the three categories, and more in one than in the other.

It is at the Training Regiment that the question of the young soldier obtaining a commission first arises. The names of those considered to have necessary qualifications to make an officer are forwarded to the Regimental Board. If he has family connections he will probably have already made private efforts to arrange that the Regiment will ask for him, if and when he is selected to go to his pre-O.C.T.U. or O.C.T.U. This Regimental Board consists of three officers, and is followed by an interview with the Commanding Officer. Next comes the War Office Selection Board for O.C.T.U.s.

Tests are most comprehensive. Many are manual; some are of the puzzle type. Typical verbal tests are: (1) "Quick means the opposite of lame, old, fast, lazy, slow?"; (2) "Which of these words is of a different class from the rest—hirsute, cunning, astute, insane, obtuse?"

The young soldier, though he can now be called a trooper, will also have to deliver a three-minute address on anything from the Second Front to the Beveridge Report. Besides having his brain tested, he also has to put up a good performance in a cross-country run, an obstacle course and a team task such as handling a 6-pdr. If a trooper has survived thus far, he has a personal interview with the President and other officers of the Board, and lives for two or three days in an Officers' Mess, where a fatherly but scrutinising eye is kept on his behaviour and actions. If he is approved, he now goes to the pre-O.C.T.U. battalion at Blackdown for a nine-weeks course. Here he will find other officer candidates from all branches of the Army.

The first three weeks are devoted exclusively to general military training, followed by fortnightly, but completely elastic, courses in driving, gunnery and wireless. He also has his share of guard duties, night marches and ordinary drill. In addition, he receives lessons in leadership for all ranks from corporal to squadron leader. But such good judgment of men is shown during the earlier stages of his training that barely 5 per cent. of those selected for Blackdown are R.T.U. (returned to their unit).

The final stage of the trooper's progress is Sandhurst, where the Brigade of Guards and the Reconnaissance Corps also send their future officers. In the old days, it cost a boy's parents something in the neighbourhood of £400 a year to put him through Sandhurst. To-day it costs them, of course, exactly nothing. Sandhurst, incidentally, has been extended almost out of recognition. Besides having drill sergeants from the Foot Guards to smarten them up in foot drill and arms drill, the potential officers have to learn tank tactics, navigation, harbouring, advanced tank gunnery and wireless, tank-driving and maintenance, and all the duties of an officer in the R.A.C. There are battle camps in which the potential officers have to sleep out, ford rivers and generally acclimatise themselves to actual Service conditions. At night the troop officers dine in the Cadets' Mess and keep an amiable eye on their charges.

This course lasts twenty-four weeks, culminating in the impressive Passing-out Parade.

In addition to all this, there are two other methods of getting into the Royal Armoured Corps through the Universities. The first is a short University course, lasting for six months, under Army arrangements at Durham, Leeds, Glasgow, Edinburgh and Belfast. Primarily, these Army courses are for training potential Royal Artillery and Royal Engineer officers selected from candidates with mathematical and scientific qualifications. They can, however, volunteer for the Royal Armoured Corps, submit their names and be interviewed by a senior Royal Armoured Corps officer. If they are approved, they will, on completion of their University course, go to a Primary Training Centre for six weeks, and then straight on to a pre-O.C.T.U., thus by-passing the five months in the Training Regiment.

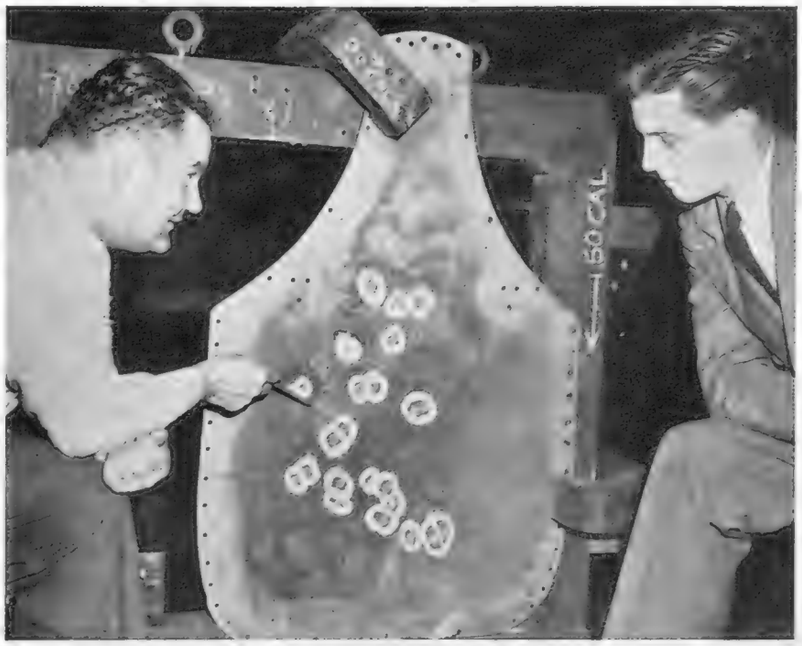
The other University course is only in existence at Oxford and Cambridge. Here undergraduates can join the Royal Armoured Corps Contingent of the Senior Training Corps and, if accepted as likely officer material at the end of their studies at the University, will have the six weeks at the Primary Training Centre and proceed direct to the pre-O.C.T.U.

HOW BRITISH TANKS PASS THEIR "MUD TEST." On a testing-ground, thick in mud and slime, the newly-built fighting vehicles are subjected to severe tests: they have to drive through the morass and are expected to tow another tank behind them. Here a Valentine is successfully hauling out a cruiser Mark IV

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export

PROTECTING the U.S. AIRMAN: *And Other Items of War News from Different Parts of the World*

EL COATS FOR U.S. AIRMEN: Trying out one of the new jackets, whose metal casing has been processed by a secret method



THE BACK SHIELD OF THE STEEL JACKET FOR FIGHTER PILOTS being examined after severe tests. Major-General Eaker, head of the U.S. Air Forces in Britain, has revealed that American airmen bombing Germany will soon be wearing steel jackets made to withstand the effects of enemy 20-mm. shells which sometimes penetrate into the cabins of an aircraft and "mill around," injuring the crew. The latter are also to have new steel helmets to give them better protection. The picture on the left shows the shape of the steel jackets: that above shows a jacket after tests with machine-gun bullets of ·30 and ·50 calibre. These had dented, but not pierced, the jacket. The steel frame holding the new shield, however, has been pierced in several places—showing the relative hardness of the two metals

H.M.S. "SHEFFIELD" FIGHTS HER WAY THROUGH HEAVY SEAS: A picture taken at a moment when waves more than 50 ft. high were crashing on to the cruiser: The British cruiser *Sheffield* (Captain Charles Thorburn Addis) had a battle with the elements during a passage through northern waters. She ran into storms of great severity, which lasted for three days. At times the wind reached hurricane force, of more than 65 knots (about 75 m.p.h.). Driving spray formed a curtain which reduced visibility to less than a cable (200 yards). So great was the wind pressure on her hull and upper works that she was hove to with engines running at their minimum speed to give steerage way. Heavy seas stove in the starboard whaler and hurled an accommodation ladder from its sea stowage to the quarter-deck: depth-charges, smoke-floats and Carley rafts went overboard. After three days, the storm abated with surprising suddenness, and H.M.S. *Sheffield* was able to set a course for port

A REMARKABLE PHOTOGRAPH TAKEN FROM THE BRIDGE OF THE "SHEFFIELD" as she ploughed through the stormy northern waters during a gale of three days' duration

FROM ALEXANDRIA TO BENGHAZI, with supplies for the Eighth Army. Men and ships of the Merchant Navy have been backing up the victorious advances of the Eighth Army by carrying vital supplies from the base at Alexandria to the harbour at Benghazi, in Cyrenaica. Royal Navy and Army have co-operated in the landing of the stores and their despatch to the men in the fighting line. The above picture was taken as the captains of the merchantmen, later to sail in convoy for Benghazi, conferred with the Divisional Sea Transport Officer at Alexandria

AMPHIBIAN "JEEPS" TAKE TO THE WATER during trials in the United States. These tanks are now being produced for the American fighting forces in the field. Before being shipped out, however, the amphibians are tested in a river in the Detroit area: any defects discovered during the cruise can then quickly be remedied. These "land-water" cars weigh a quarter of a ton: they are equipped with four wheels, but can also propel themselves as boats. On land they can carry out every task demanded of the versatile and useful "Jeep"

AWAY FROM THESE WARS . . . .

Memories and Thoughts of the Years Between

—A Fortnightly Causerie **By J. G.**

THE Laughter of Fools.—"The heart of the wise is in the house of mourning, but the heart of the fool is in the house of mirth." The aphorism is from Holy Writ, though I have heard many a noble Christian preach (and practise) the very converse doctrine.

It is a hard saying, but it is justified by experience of humanity in one frailty at least over the centuries. The house of mirth is built on foundations largely composed of human vanity and pride in man's achievements and wisdom, and only in small part on foundations of simplicity, humility and faith in

A DANISH-BORN ENGLISHWOMAN CURING LONDON'S RAID-SHOCKED CHILDREN. Mrs. Estrid Dane rolling a London baby over on the table during one of the exercises through which she cures them of "shell shock"

divine guidance. Every generation tends to despise the follies, foibles and ignorance of its predecessor, and to glorify its own knowledge and wisdom and inventive genius. Every generation believes it has almost reached the peak of human advancement in invention and knowledge of how to live. And, so firmly is this vanity established, only very occasionally does a national calamity (such as a world war) induce a doubt.

There are lesson-books ever to our hands which teach this lesson of human pride and folly with unmistakable clearness—the history-books of our own nation. But we never read them for this purpose. We read them to increase our pride, not to correct our vanity. And because the lessons of our history-books cry out to the deafest, the old gods of Olympus never enjoy so loud a laugh at the folly of mankind as when they turn to this common failing of each new generation.

Why is this foolish pride so crass an example of ignorance and vanity? Above all, because men tend to confuse cleverness with wisdom and scientific invention with planned and disciplined progress.

When we glorify the inventions of our own generation (and despise the benighted ignorance of our fathers), we forget an elementary fact—that every chapter of discovery or invention is bound up with the preceding, and with the subsequent, chapters in our history-books. The source of the river (be it called the Thames or Progress) is always farther back, its outlet to the sea is always farther on. But the river is *one*. Without the source, it would be a dry bed. Without the outlet, it would be a stagnant pool. As scientific invention advances—which it tends to do alternately by rapid bursts of speed and long periods of marking time over the centuries—does human wisdom increase in step? The history-books are clear on the point. The answer is in the negative. A very few examples, chosen haphazard and trivial in their nature, serve to prove it. The Victorians lived in security and peace, with no sanitation to speak of. We live in supreme misery, in constant suffering, anxiety and dread, with radio and planes and drains. Which would you choose? Earth-closets and security or aeroplanes and nights and days of terror?

Whose Absurdities?—We ridicule—even our best writers invite us to ridicule—the foibles, the tastes, the dress fashions, the myopia of our ancestors. But even the best writers dare not go so far as to dismiss the claims to greatness and wisdom of many great ones of the past. Shakespeare, Bacon, Dr. Johnson, Darwin—a few such names are left undisputed on the pedestals which history raised for them. It is odd, is it not, that the writers of our day who encourage us in this contempt of our ancestors' tastes and fashions forget that those undethroned great ones saw nothing absurd in those tastes and fashions, and indeed embraced them without shame and even with pride. Ruffs, trunks, crinolines and bustles, buttons and pork-pie hats, frock coats and high collars, beefsteak breakfasts and cowdung medicines—they embraced them in turn. And while we dare not question the wisdom of the few among our ancestors raised on pedestals, we dismiss the bulk, the rank and file, as primitive. But we go farther: we ridicule the "absurdities" of the fashions of our *fathers*. Yet, if we pause only to turn back the pages of our own chapter in history, to examine only the fashions of our own childhood, we should surely laugh as loudly at the comic ignorances of our younger selves as we laugh at the myopia of our fathers.

Turn up the group at your private school in the old family album. No need to go back to your whiskered great-uncles or your bustled, buttoned great-aunts. In his "younger-self" cartoons, Max Beerbohm underlines the lesson in its big and in its trivial aspects better than I can. Not a year passes but we build proofs of our own inconsistency and lack of humour and logic, destroying our claim to have reached a higher rung. For ever we confuse cleverness with wisdom, invention with common sense and ephemeral fashions with progress. For ever we believe *revived* ideas to be new ideas, and reject the history-book which cries aloud that there is no new thing under the sun.

Wiser than Our Fathers?—And only once in a way, during a period of bitter suffering, a man realises the truth: "I am no better than my fathers"; and in humiliation and disillusionment he cries out his discovery (which is printed in bold red type on every page of his neglected primers).

True wisdom is to read those primers and to appreciate this glaring failing of humanity. We are right to aim to be wiser than our fathers. So far we have only succeeded in being cleverer, and that is not the same thing. It has cost us our peace of mind, our serenity in faith, our discipline of character, our joy in life, our present and our future. We should at least derive what good we may from our past.

These are the lessons which our past history teaches us, forces down our throats with a fork:

Wisdom and cleverness are as different as cheese and chalk. Character and patience, toleration and restraint, humility and simplicity—these are the attributes of human wisdom in all ages, and there is as much good as of bad in the traditions of the past.

The inventions of science are dangerous weapons in ignorant hands. Only in the hands of the wise can they be converted into blessings and diverted from becoming curses to mankind. Social fashions have no bearing on social progress. Like influenza, they are recurrent, ephemeral visitations, sometimes mild, sometimes grievous afflictions, but never new and never permanent. They are accepted by the wise (as they are embraced by the foolish) because on the whole it is undesirable to be distinguished from the crowd in outward trivial forms and matters.

In ideas, big or small, there is no new thing under the sun, and all discoverers travel the moss-grown bypaths worn by their forbears.

Human happiness is to labour with your hands the thing that is good, in humility and simplicity; and human wisdom is summed up in Monte Cristo's *envoi* to the Morels—*wait and hope*. "Man never is, but always to be, blessed." In a word, human ridicule of the past is the laughter of fools, and the chief comedy in the repertoire of Olympus.

And I sometimes think that Lytton Strachey, who, willynilly, led the vulgar herd to mock and debunk the Victorians, was wise to vanish from the scene before 1939. For we might have turned upon him living, and crowned him with a fool's cap instead of a laurel wreath. The Victorians did not sleep like cave-men in holes in the ground. They slept in peace and night-caps in feather-beds.

LITTLE LEGS BEING STEADIED AGAIN at Mrs. Dane's clinic at Lewisham: With money provided by the British War Relief Society of America, Mrs. Estrid Dane is using a German system of treatment at Lewisham to cure children suffering physically from the effects of the air raids. Mrs. Dane studied this system of physical exercises for babies under Professor Neumann Neurode, of Berlin: some years ago she came to this country, and is now applying her knowledge and skill to eradicate the harmful results of the blitz on English children

The Shaftesbury Homes and "Arethusa" Training Ship

A Bisley boy has just passed the R.A.F. Artificers' Examination, being placed 50th out of 450 candidates. This speaks well for the educational training the boys under the Society's care receive. Supported by voluntary contributions. Gifts always welcome. Address: 164, Shaftesbury Avenue, London, W.C.2.

The New London Productions

Reviewed by PHILIP PAGE

IT 'S Foolish But It 's Fun.—So frequently one hears it said of some new revue in which deficiencies are obvious that "it will be all right when it has been pulled together." In most cases this is vain optimism, since there is nothing to pull together. But this show at the Coliseum, which at the first performance struck me (and a good many other people, it seems) as a rather gloomy affair, despite the energy of Messrs. Nervo and Knox, has its qualities, and I fancy all may yet be well, if, indeed, it is not well already. When I saw it, the non-foolish part was by far the best—pretty and well-dressed scenes, most of them being what it is the fashion nowadays to call "nostalgic," first-rate dancing by Miss Pamela Foster and Miss Lulu Dukes in ballets of taste, good singing by Mr. Bruce Carfax and neat daintiness by Miss Nancy Burne. The sketches were rather disappointing, the surest touches of gaiety being given by the Can-Can dancers of Paris in the 'eighties (are we ever going to have a musical show in London without these?) and by a brace of brilliant clowns on bicycle-wheels.

Skip Out With Phyllis.—About the only trace of originality I could discover in this revue at the Whitehall was that the Can-Can dances occurred right at the beginning; usually they are reserved for a finale. The girls dance well, and Murray, the illusionist, etc., knows his stuff and gets people in and out of boxes in sufficiently mysterious fashion. Miss Phyllis Dixey manages to make strip-tease dull, or at any rate unexciting, and talks about herself in a genteel undertone.

Hedda Gabler.—Miss Sonia Dresdel, the latest Hedda Gabler, is at times almost as inaudible as Miss Dixey, though not quite. Since in Ibsen's grey masterpiece there is no scope for strip-tease, she should have had time to concentrate on letting the words be heard. I am quite prepared to believe that Miss Dresdel is, or may one day become, quite a good actress. But until she takes the trouble to let the audience hear what she is talking about, judgment—at any rate, so far as I am concerned—must be suspended. I am, I should add, not in the least deaf and heard perfectly every other member of the cast—on the whole, a more than adequate one.

PICTURES of HOME FRONT ACTIVITIES

THE QUEEN AT FULHAM PALACE, when she received the Committee and Workers of the Church's Work for Women in the Forces. She is here seen with Mrs. Fisher, wife of the Bishop of London, walking through the Palace grounds

THE QUEEN INSPECTS A PAIR OF BOOTEES, part of a layette sent over from America for distribution here. A few days ago Queen Elizabeth visited the Dudley House Committee at 39, Charles Street : whilst there she was asked by Lady Ward, the chairman, to hand over a cheque for a memorial to the late Mrs. Robert E. Strawbridge, of Philadelphia, to an official of the Papworth Village Settlement (in the absence through illness of the Chairman of the Settlement). Mrs. Strawbridge, since the beginning of 1940, had sent supplies from America to be distributed at the discretion of the Dudley House Committee. The memorial will take the form of six cottages at the Papworth Settlement in which former patients from the Papworth hospitals will live with their families while working in the Papworth Industries

THE FIRST LEASE-LEND AMBULANCE TRAIN (pulled by an American engine) goes into service in Britain. A number of these trains, to be used by both the United States and British armies, are being constructed in the shops of the main railway companies in England. Each Army is to have its own crews and staffs operating its respective trains. The first of them was handed over to the American Army at a West of England base a few days ago and is going into immediate service. Its primary use will be to rush wounded from the battle areas and hospital ships to general hospitals, with treatment given on the train *en route*. It is so powered, however, that it can be side-tracked and then function on its own as a Field Hospital, with its own electricity, hot water, heating, etc. It contains ward, staff and operating cars. In addition to the train crew, there is a staff of approximately forty medical attendants

THE DUCHESS OF KENT LENDS HER AID to a Canadian photographer at Plymouth. When the Duchess opened the new Headquarters of the Canadian Fire Fighters at Plymouth, she posed for an "official" picture with important officials. But something went wrong with the camera, and the Duchess left the group to see if she could give the photographer assistance

A SEVENTY-SEVEN-YEAR-OLD L.M.S. ENGINE which has served the nation in three wars. No. 20,002 is Britain's oldest locomotive on regular service : she is seventy-seven years old and has completed over 1,500,000 miles. (Her exact mileage on February 1, 1943, was 1,580,436.) She carried troops on their way to the South African War and to the war of 1914-18 ; and now she is hauling tanks and guns. In her day she was one of Britain's fastest expresses, and she has retained throughout the admiration and affection of her cleaners, drivers and firemen

A NEW FILM OF THE B.B.C. BRAINS TRUST, with Sir William Beveridge as one of its members, is now being made at Elstree. From left to right above are seen Professor C. E. M. Joad, Dr. Julian Huxley, Sir William Beveridge, Mr. Donald McCullough (Question Master), Commander Gould and Commander Campbell

The World of Books—By Vernon Fane

SOBER READING, in TRUTH and FICTION

A Royal Engineer and the "Phoney War"; Miss Carson McCullers' Second Novel; Mr. Bailey's Mr. Fortune Once Again; Mr. Stephen Lister Among the "Persuaders."; Maniacs and Murder

A WAR book in the exact sense of the word is SWORD OF BONE (Faber. 8s. 6d.); a story of the British Expeditionary Force in France from December 1939 until the evacuation from Dunkirk in the last days of the following May.

The author, Mr. Anthony Rhodes, was a young officer in the Royal Engineers who was in France for all the period of what has been called the "phoney war," and was equally there when the war moved into a more desperate and decisive phase. He was among those who waited on the beaches of Dunkirk, and who could later quote the poet Aragon, when he wrote:

"Les parfums du printemps le sable les ignore
Voici mourir le Mai dans les dunes du Nord."

His book shows, among other aspects, the leisurely attitude to war that the French and the Belgians of that time had, the quiet, gay days in small country villages, the work the English did on the Maginot Line and the faith the French had in that Line; the meeting and the parting of friends, and the main interest in life, which was the search for good billets and good food.

Mr. Rhodes pulls no punches in his account of what he saw of the German attack, and his version of the extraordinary muddle and lack of co-operation between the Allied forces, culminating in forced retreat after retreat, makes sober reading. The story of his own unit's falling back on Dunkirk is a story that one has heard before, of a journey that took days instead of hours because of the congestion on the roads and the refugees' blind panic.

FERN IS A "SPARKS" GIRL AT SEA: Here is her story— For all her slim femininity, Fern is tough. She is called Fern because her father insisted on a one-syllable name to offset the family name of Blodgett, and because her mother had heard and liked the name. Fern, a Canadian, was twenty when the war broke out, working at a secretarial job with a Toronto insurance company. Early in 1940 she began a course of wireless telegraphy at a Toronto night school, as the only girl in a class of seventy men. Week after week practical tests were given, and one by one the students fell out: there were no second chances! Fern held on tenaciously until, sixteen months after she first went to the school, she and fifteen others passed out as fully-fledged wireless operators. Although the authorities were not in favour of employing women as wireless operators on board ship, Fern got such a job not very long after her training had been completed. She took her place eventually as wireless operator amongst the thirty-four officers and men of the Norwegian freighter *Mosdale*. For the first fourteen months of her service, Fern was the only wireless operator on board. Now, under the new regulations, there are three. Fern shares watches with them, doing four hours on, eight off. So far, she says she has "had no excitement"—a few submarines have been sighted, and only one enemy plane, which flew off as soon as the *Mosdale*'s guns were fired

The epic story of the evacuation itself is fresh and memorable here as it is every time one has found an eye-witness account of it, and there are details, remembered without heroics but with humanity, that bring the scene into sharp focus.

On the debit side I would set a recurring facetiousness that spoils some of the earlier passages, but it may be that that, too, was representative of those bewildering times, and on the whole I would say that Mr. Rhodes has the abilities of a very competent reporter—plus umpity poo.

The art of Miss Carson McCullers is a difficult thing to estimate, but too interesting a study to ignore. An American writer, with only two novels to her credit at present, she has already made a place for herself in American letters, and her first book, *Reflections in a Golden Eye*, has been the subject of much discussion. Her new novel, THE HEART IS A LONELY HUNTER (Cresset Press 9s. 6d.), may provide less material for controversy, but it has greater unity and coherence, and more form as a piece of creative work. The setting for the story is a small town in one of the Southern States, a place in which long periods of boredom and inertia alternate with bouts of ugly and violent action. And, parenthetically, no writer can teach Miss McCullers much about the description of violent action.

Her characters are the strangest crew, who seem to have been chosen by someone in deliberate antipathy to the classic Boy-Meets-Girl theme. There are two deaf mutes, a melancholy man who runs an all-night café, a shapeless and perpetually furious drunkard, a scrawny young girl, a coloured doctor with Marxist fervour and tubercular lungs, a gentle negress and a constantly shifting procession of toughs, drabs and alcoholics.

And, in spite of the potential grimness and misery of that cast, there are still moments of the strangest tenderness about the story, and an undeniable power and vigour that will interest any but the conservative reader.

After much thought, I am coming to the conclusion that writers of detective stories must, among all other authors, enjoy their work. There can be no other solution to their immense output. And this cannot be accounted for by the fact that thrillers are easy to write. On the contrary, a good mystery story must take weeks of time and an incalculable amount of mental energy in its planning, because this is now an expert's field, and readers as well as writers have become proficient at clue-hunting and accomplice-spotting.

Nevertheless, the stream of such works continues and is gratefully received by its lynx-eyed public, and never more so than when the new book is by Mr. H. C. Bailey and retails the adventures of one Mr. Reggie Fortune. There have been about fifteen books inspired by this astute gentleman and bearing his name in the title. Consequently, one starts on a new one with the same feeling of confidence that is engendered by any old-established and familiar production. Even on the meanest basis of their being good because thay have been going on for so long, there is something restful rather than stimulating about such old acquaintances as the Fortune books.

A "FLYING WREN" CHECKS OVER HER CAMERA before going up on a flight: Wrens of the Fleet Air Arm now perform a multitude of warlike tasks previously carried out by ratings. They do almost every job on some stations except actually flying operations against the enemy. But they do nevertheless fly—to take aerial photographs on training operations, and during practice, and to service and fit the cameras used in action. Other girls who fly in the F.A.A. are the radio mechanics, who repair and test the wireless sets and the secret equipment. These Flying Wrens have made possible the release of many hundreds of men for combatant duties. The country has reason to be grateful to them for their cheerfulness in carrying out many intricate and onerous tasks

MR. FORTUNE FINDS A PIG (Gollancz. 8s. 6d.) is the freshest off the assembly-line and has a number of new features, including a very exciting Nazi spy chase, an ancient castle, blood sacrifices and some effective and high-powered co-operation by the Royal Navy. And if you would like to know how the homely or domestic pig finds a place in this tale, I will give you the clue of the culture of virulent typhus germs, and leave you to work the rest out for yourself, with, as my recommendation, Mr. Bailey's book for your guide.

The world of what Mr. Stephen Lister calls "the professional persuader" is one in which lions and tigers might well walk with circumspection. Mr. Lister's new novel is chiefly concerned with advertising men, but he is inclined to list lawyers and priests on the same basis. However, for the purposes of SOFTLY SOFTLY CATCHEE MONKEE (Peter Davies. 8s. 6d.), the wiles of the advertisers are more than sufficient, although espionage, an active religious organisation and a suggestion or two of the Third Reich are added for good measure.

Jeremy Dowbiggin was notably tough and resourceful in a profession that supposedly makes great demands on both these attributes. He was a self-made man, and he was not dissatisfied with the finished product. His marriage and his love affairs were more businesslike than romantic, which paradoxically meant that his working career was far more successful than his domestic career.

When he was asked to run a vast publicity campaign for the leader of a new "movement" Dowbiggin's enquiries were not concerned with ethical values, even with the character of the man to be publicised, but with the states of one or two relevant bank accounts.

Only after the campaign had been launched with a resounding bang and a splash did he discover that he was in some measure playing Germany's hand, and instantly started to dissociate himself from the undertaking.

The book therefore has two distinct threads to its plot: one which is the stronger, is the progress of an adventurer in a particularly hard trade; the other, a spy romance of contemporary London. "You pays your money"—and you get them both. It is an unexpected combination, but Mr. Lister has done a neat welding job with his flippant and facile pen.

About the last book that one might have expected from the author of that slight and amusing stage comedy, *George and Margaret*, has, in fact, just been published. Mr. Gerald Savory's first novel has nothing but good construction in common with his play. BEHOLD THIS DREAMER (Chapman and Hall. 8s. 6d.) is the story of a congenital idiot, shapeless and shambling, who is wrongly accused of a series of bestial murders in a small shipping town.

The boy's mindlessness has gaps through which filter occasional words, and occasional gestures which have some meaning for him: a meaning generally quite foreign to their original intention. In this way the word "Israel," caught from a Bible reading, means to him some kind of glittering sanctuary, and this he attempts to realise for himself by building a little refuge in a wood, to which he takes every piece of brightly-coloured broken china and glass that he can pick up.

He forms these fragments into the rough shape of a cross, in imitation of one that he has seen and greatly admired in a shop window, and night after night he makes for the wood, lumbering through the rain and cold, and offering a likely enough target to the suspicious and the fearful.

Although the maniac responsible for the crimes is finally caught, the mad boy dies too, muddled and frightened by a chase of which he believes himself the victim.

Not the kind of book to give a reader cheer and solace, as you may well imagine, but an interesting experiment in the dark places of the unconscious.

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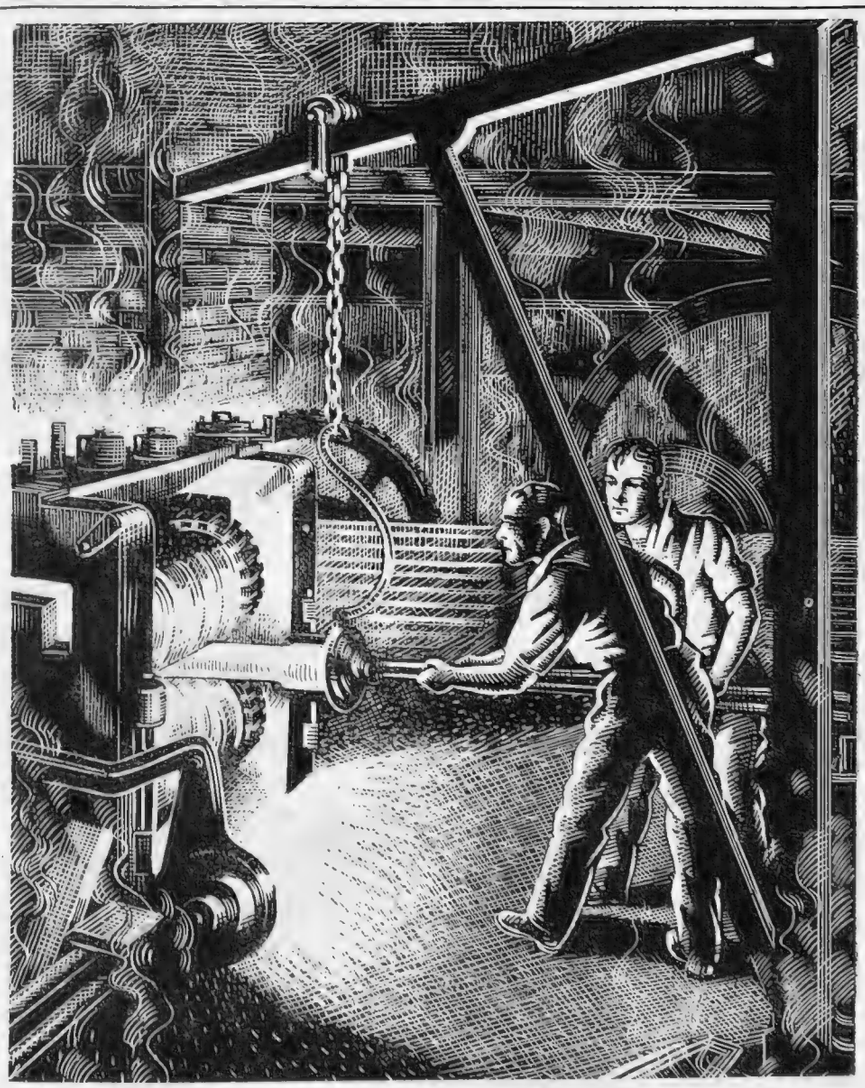

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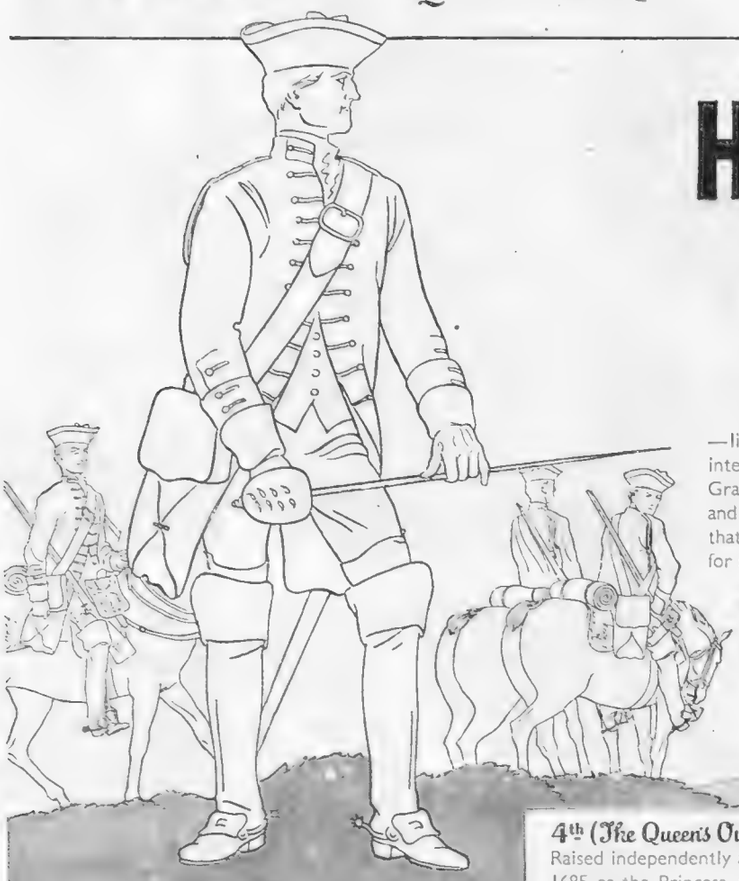

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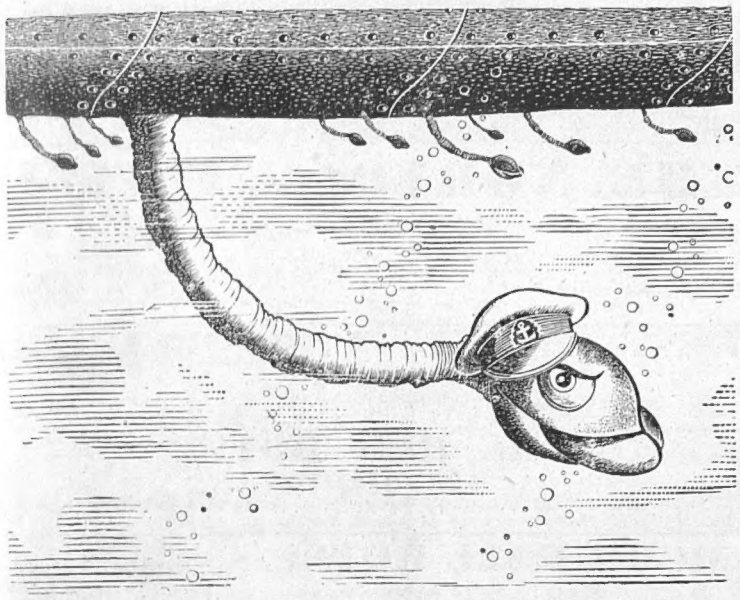

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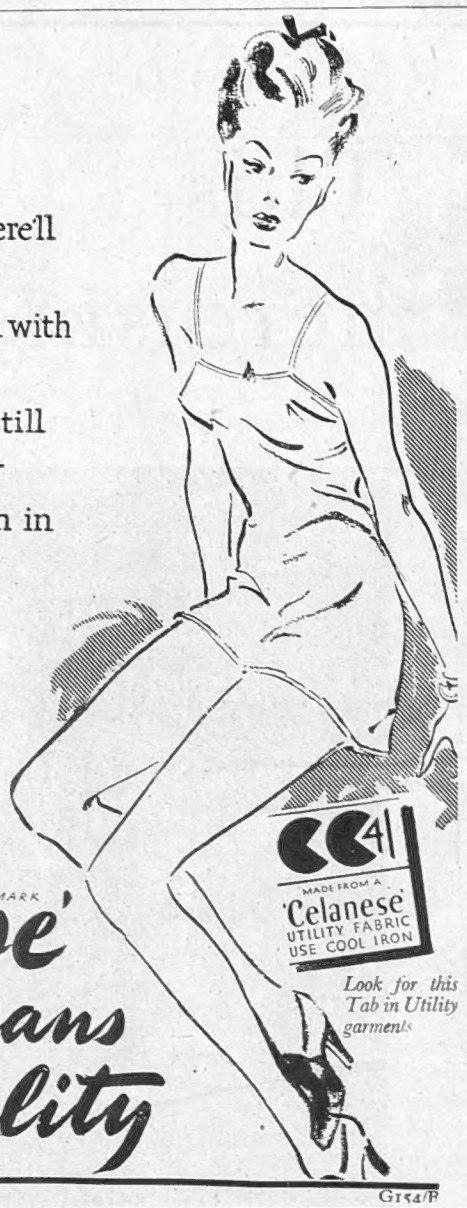

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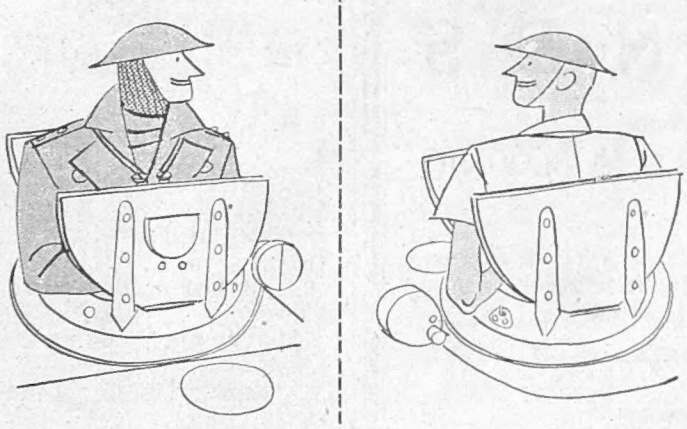

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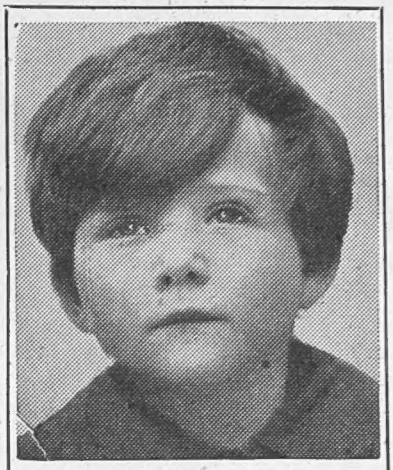

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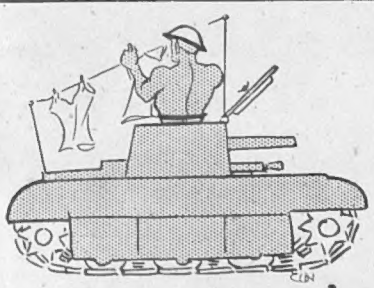

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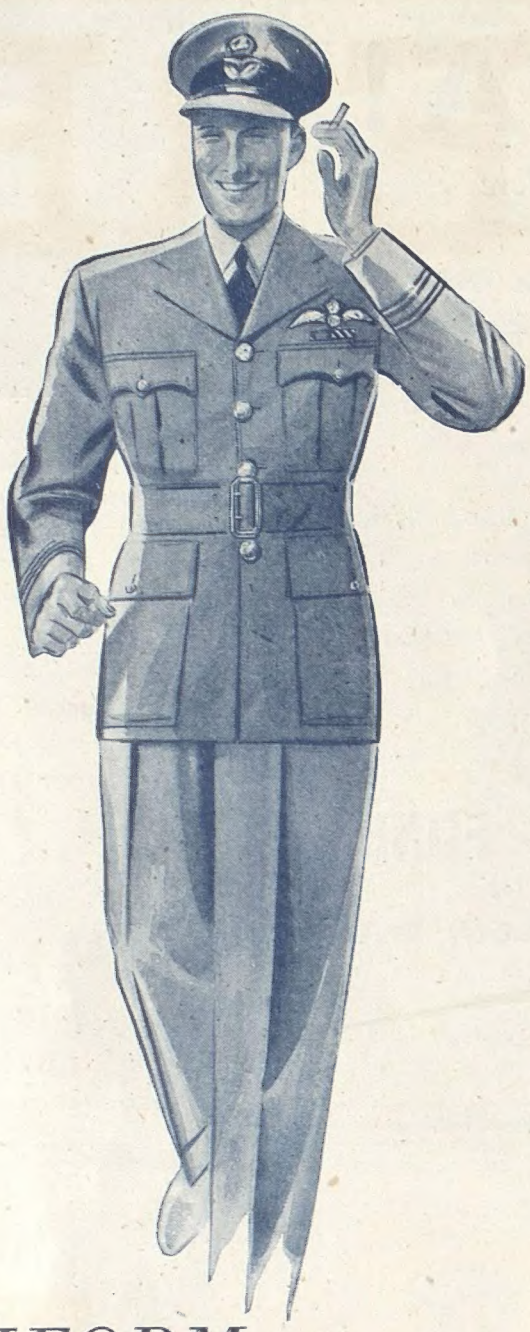

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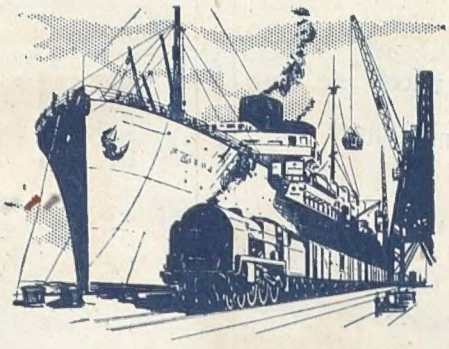

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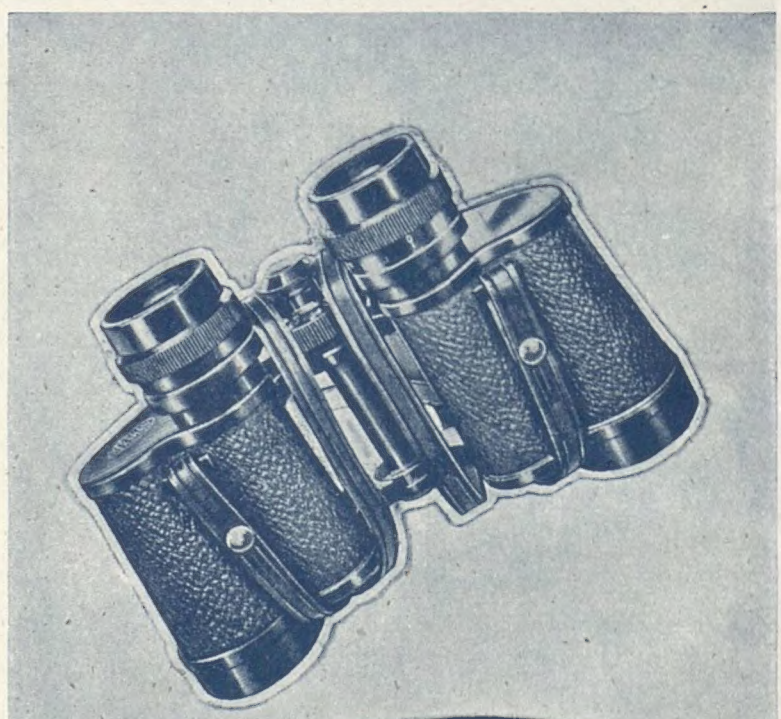

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